LLNL Livermore Site Fourth Quarter 2008 Self-Monitoring Report

The following is the fourth quarter 2008 self-monitoring data for the treatment facilities and Lake Haussmann at the Lawrence Livermore National Laboratory (LLNL) Livermore Site. As has previously been discussed, when the final FY 2008 Omnibus Appropriations Bill was passed by Congress, the Livermore project received only about 50% of the requested budget. As a result, a number of treatment facilities had to be shut down to meet this new, much-reduced funding level. Other facilities became non-operational during the year and were not repaired due to insufficient resources. Additionally, TFD-HPD and VTFD-HPD were shutdown in October 2007 to prepare for an *in situ* bioremediation treatability test, which was interrupted as a result of the FY08 budget reduction.

In late July 2008, funding was restored and ERD developed the Remediation Evaluation (REVAL) process to bring facilities back to operational status. ERD initiated the REVAL process at several facilities during the fourth quarter 2008, resulting in the re-activation of TF406 and TFA-E. TFA-E operations were suspended on December 18 for freeze protection, and were restarted on December 29, 2008. REVAL activities were also focused on TFA, TFC-SE, and TFE-HS during the fourth quarter 2008, in an effort to restart these facilities during the first quarter of 2009.

ERD plans to implement or continue the REVAL process at the remaining non-operational facilities for quality assurance purposes. These facilities include: TFC-E, TFD, TFD-S, VTFD-ETCS, VTFD-HS, TFE-E, TFE-SE, VTFE-ELM, VTFE-HS, TFG-N, TF406-NW, VTF406-HS, VTF511, TF518-N, TF518-PZ, VTF518-PZ, TF5475-1, TF5475-2, TF5475-3, and VTF5475. The following facilities remained operational during FY08 and continued to operate during the fourth quarter 2008: TFB, TFC, TFD-W, TFD-SE, TFD-SS, TFE-SW, TFE-W, TFE-NW, and TFG-1. TFA West was shutdown in January 2008 after a year-long treatability test and is operational only during monthly sampling events.

The volumes of ground water and soil vapor treated and volatile organic compound (VOC) mass removed during the fourth quarter of 2008 are presented in Tables 1 and 2, respectively. An historical summary of VOC volume and mass removed are presented in Tables 3 and 4, respectively.

Attachment A presents ground water treatment facility and extraction well (ground water and soil vapor) VOC, chromium, bioassay, turbidity and chloride analyses (Tables A-1 through A-5). During the fourth quarter of 2008, all effluent sample analyses were within acceptable discharge limits. An addendum presenting analytical results from extraction wells associated with treatment facilities that were restarted during this reporting period and nearby monitor wells is included at the end of Attachment A.

Self-monitoring reports for all treatment facilities are presented in Attachment B. Monthly volumes of ground water extracted are shown in Attachment B; however, instantaneous flow rates are not shown for wells that are now only used for sampling and are not continuously pumped. The monthly volume shown for these wells is the quantity of water evacuated for sampling purposes. Monitoring data for Lake Haussmann are presented in Attachment C.

A well location map showing wells and treatment facilities, and ground water elevation contour maps showing hydraulic capture zones for hydrostratigraphic units (HSUs) 1B, 2, 3A, 3B, 4, and 5, are presented in Attachment D. There were no new monitoring wells installed during this reporting period. The contour maps for the individual HSUs are based on October data; due to the budget reduction, water levels were only collected during the month of October.

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Table 1. Volumes of ground water and soil vapor extracted and treated at the Livermore Site, October through December 2008.

Treatment Area ^a	Month	Volume of ground water extracted (Kgal) ^b	Volume of vapor extracted (Kft ³) ^b
TFA	October	0	-
	November	5	-
	December	18	-
TFB	October	1,686	-
	November	1,439	-
	December	1,714	-
TFC	October	2,450	-
	November	1,782	-
	December	2,745	-
TFD	October	2,329	0
	November	1,761	0
	December	2,464	0
TFE	October	1,533	0
	November	1,116	0
	December	1,698	0
TFG	October	393	-
	November	332	-
	December	421	-
TFH	October	25	0
	November	174	0
	December	794	0
TOTAL		24,879	0

^a Totals include ground water and soil vapor extracted from the following facilities:

TFA area: TFA, TFA-E, TFA-W

TFB area: TFB

TFC area: TFC, TFC-E, TFC-SE

TFD area: TFD, TFD-E, TFD-HPD, TFD-S, TFD-SE, TFD-SS, TFD-W, VTFD-ETCS, VTFD-HPD, VTFD-HS

TFE area: TFE-E, TFE-HS, TFE-NW, TFE-SE, TFE-SW, TFE-W, VTFE-ELM, VTFE-HS

TFG area: TFG-1, TFG-N

TFH area: TF406, TF406-NW, TF518-N, TF518-PZ, TF5475-1, TF5475-2, TF5475-3, VTF406-HS, VTF511, VTF518-PZ, VTF5475

TFF started operation in February 1993 for fuel hydrocarbon remediation. In August 1995, the regulatory agencies agreed that the vadose zone remediation was complete, and in October 1996 a No Further Action status was granted for the ground water.

^b Totals are derived from individual extraction wells shown in Attachment B

^c Rounded number

Kft³ = thousands of cubic feet

Kgal = thousands of gallons

Table 2. VOC mass removed at the Livermore Site, October through December 2008.

Treatment Area ^a	VOC mass removed from ground water (kg)	VOC mass removed from soil vapor (kg)	Total VOC mass removed (kg) ^b
TFA	0.006	-	0.006
TFB	0.4	_	0.4
TFC	1.0	-	1.0
TFD	3.7	0	3.7
TFE	0.7	0	0.7
TFG	0.08	-	0.08
TFH	0.02	0	0.02
TOTAL ^b	5.9	0.0	5.9

Table 3. Historical summary of volumes of water and soil vapor removed at the Livermore Site through December 2008.

Treatment Area ^a	Volume of ground water extracted (Mgal)	Volume of vapor extracted (Kft ³)	
TFA	1,566	-	
TFB	358	-	
TFC	361	-	
TFD	826	49,708	
TFE	300	124,223	
TFG	58	-	
TFH	130	163,208	
TOTAL ^b	3,599	337,139	

Table 4. Historical summary of VOC mass removed from water and soil vapor at the Livermore Site through December 2008.

Treatment Area ^a	VOC mass removed	VOC mass removed	Total VOC mass
	from ground water (kg)	from soil vapor (kg)	removed (kg) ^b
TFA	194	-	194
TFB	72	-	72
TFC	88	-	88
TFD	764	84	848
TFE	200	141	341
TFG	9	-	9
TFH	29	1,128	1,157
TOTAL ^b	1,356	1,353	2,709

^a Refer to Table 1 footnote for facilities in each treatment facility area.

Abbreviations for Tables 2, 3 and 4:

 \mathbf{Kft}^3 = thousands of cubic feet.

Kg = Kilograms.

Mgal = millions of gallons.

VOC = Volatile organic compound.

^b Rounded number.

Attachment A

VOC, Chromium, Bioassay, Turbidity, and Chloride Analyses

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample	Date	Analytic											
Station	Sampled	Method	CCI ₄	CHCI ₃	1,1-DCA	1,2-DCA	1,1-DCE	1,2-DCE	Freon 113	PCE -	1,1,1-TCA	TCE -	Freon 11
			<-	-	-	-	ug/L (ppb)	-	-	-	-	-	->
TFA ^a													
TFA-E ^b													
W-254	19-NOV-08	E601	< 0.5	< 0.5	< 0.5	< 0.5	0.66	<1	<0.5	73	< 0.5	1.8	<0.5
STU06-I	09-DEC-08	E601	<0.5	<0.5	<0.5	<0.5	0.59	<1	<0.5	67	<0.5	1.8	<0.5
STU06-E	19-NOV-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
STU06-E	09-DEC-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFA-W ^c													
W-404	24-OCT-08	E601	< 0.5	< 0.5	1.7	< 0.5	2.5	<1	< 0.5	11	<0.5	< 0.5	<0.5
W-404	21-NOV-08	E601	< 0.5	< 0.5	1.6	< 0.5	2.4	<1	< 0.5	10	<0.5	0.6	<0.5
W-404	18-DEC-08	E601	<0.5	<0.5	1.8	<0.5	2.5	<1	<0.5	10	<0.5	<0.5	<0.5
TFA-W-E	24-OCT-08	E624	<1	<1	1.6	<1	2.3	<1	<1	9.9	<1	<0.5	<1
TFB													
TFB-I002	09-OCT-08	E601	< 0.5	2	< 0.5	< 0.5	1.7	<1	2.2	0.96	<0.5	5.5	<0.5
TFB-I002	04-NOV-08	E601	< 0.5	2	< 0.5	< 0.5	1.6	<1	2.7	0.88	<0.5	5.9	< 0.5
TFB-I002	02-DEC-08	E601	0.5	2	<0.5	<0.5	1.6	<1	3.2	1.1	<0.5	7.1	<0.5
TFB-E002	09-OCT-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFB-E002	04-NOV-08	E601	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1	<0.5	< 0.5	<0.5	< 0.5	< 0.5
TFB-E002	02-DEC-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFC													
TFC-I003	13-OCT-08	E601	< 0.5	1.5	< 0.5	< 0.5	1.3	<1	12	6.1	<0.5	16	< 0.5
TFC-I003	04-NOV-08	E601	< 0.5	1.4	< 0.5	< 0.5	1.1	<1	13	6.5	<0.5	17	< 0.5
TFC-I003	02-DEC-08	E601	<0.5	1.4	<0.5	<0.5	1.1	<1	14	6.4	<0.5	16	<0.5
TFC-E003	13-OCT-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFC-E003	04-NOV-08	E601	< 0.5	<0.5	<0.5	< 0.5	< 0.5	<1	< 0.5	< 0.5	<0.5	< 0.5	<0.5
TFC-E003	02-DEC-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFC-E ^d													
TFC-SE ^e													

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample	Date	Analytic											
Station	Sampled	Method	CCI ₄ <-	CHCI ₃	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)		Freon 113	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFD ^f													
TFD-E													
PTU8-I	14-OCT-08	E601	6.1	1.9	0.59	1.7	12	<1	0.79	8.5	<0.5	120	1.8
PTU8-I	05-NOV-08	E601	6.2	1.9	0.59 0.51	1.7	10	<1 <1	0.79	9.3	<0.5 <0.5	110	1.6
PTU8-I	03-NOV-08	E601	6.2	1.7	0.56	1.6	10	<1	0.84	9.3 9.2	<0.5 <0.5	130	1.9
P106-1	03-DEC-06	E001	0.3	1.7	0.56	1.7	10	<1	0.04	9.2	<0.5	130	1.9
PTU8-E	14-OCT-08	E601	<0.5	< 0.5	< 0.5	<0.5	<0.5	<1	< 0.5	< 0.5	<0.5	<0.5	<0.5
PTU8-E	05-NOV-08	E601	< 0.5	< 0.5	< 0.5	< 0.5	<0.5	<1	<0.5	< 0.5	< 0.5	< 0.5	< 0.5
PTU8-E	03-DEC-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD-HPD ^g													
TFD-S ^h													
PTU2-I	21-NOV-08	E601	7.1	2	0.65	<0.5	18	<1	3.2	8.9	<0.5	360	1.6
PTU2-I	22-DEC-08	E601	8.1	2.3	0.85	0.53	24	<1	3.8	9.3	<0.5	420	1.7
		_00.	· · · ·		0.00	0.00			0.0	0.0	10.0		
PTU2-E	21-NOV-08	E601	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1	< 0.5	< 0.5	< 0.5	< 0.5	<0.5
PTU2-E	22-DEC-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD-SE													
PTU11-I	15-OCT-08	E601	0.63	1.2	1.4	5.5	22	<1	<0.5	91	<0.5	160	<0.5
PTU11-I	05-NOV-08	E601	0.68	1.3	1.5	6.2	25	1.1	<0.5	87	<0.5	160	<0.5
PTU11-I	03-DEC-08	E601	0.65	1.3	1.6	6.3	24	1.1	<0.5	100	<0.5	190	<0.5
PTU11-E	15-OCT-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU11-E	05-NOV-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU11-E	03-DEC-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD-SS													
PTU12-I	07-OCT-08	E601	2.7	3.1	<0.5	1.5	10	<1	1	20	<0.5	120	5.9
PTU12-I	18-NOV-08	E601	3.1	3.1	<0.5	1.4	9.2	<1	1.2	21	<0.5	110	6.4
PTU12-I	18-DEC-08	E601	3	3	<0.5	1.4	8.6	<1	1.1	20	<0.5	130	7.4
PTU12-E	07-OCT-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU12-E	18-NOV-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU12-E PTU12-E	18-DEC-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
1 1012-E	10-DEC-00	LUUI	\0. 0	~0.5	\0.5	~0.5	~0.0	<u> </u>	~0.0	~0.5	~0.0	~0. 5	<0.5

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CCI ₄	CHCI ₃	1,1-DCA	1,2-DCA	•	1,2-DCE	Freon 113	PCE	1,1,1-TCA	TCE	Freon 11
			<-				ug/L (ppb)		-		-	-	->
TFD-W													
PTU6-I	08-OCT-08	E601	0.59	3.4	< 0.5	< 0.5	<0.5	<1	<0.5	< 0.5	<0.5	8	95
PTU6-I	17-NOV-08	E601	0.66	3.4	<0.5	< 0.5	< 0.5	<1	0.59	< 0.5	<0.5	8.6	100
PTU6-I	16-DEC-08	E601	0.65	3.4	<0.5	<0.5	<0.5	<1	0.55	<0.5	<0.5	8.4	94
PTU6-E	08-OCT-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU6-E	17-NOV-08	E601	< 0.5	< 0.5	<0.5	< 0.5	<0.5	<1	< 0.5	< 0.5	< 0.5	< 0.5	<0.5
PTU6-E	16-DEC-08	E601	<0.5	<0.5	< 0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFE-E ⁱ													
TFE-HS ^j													
TFE-NW													
PTU9-I	07-OCT-08	E601	0.5	1.3	<0.5	< 0.5	< 0.5	<1	0.8	<0.5	<0.5	12	<0.5
PTU9-I	19-NOV-08	E601	0.58	1.4	<0.5	<0.5	<0.5	<1	0.97	<0.5	<0.5	12	<0.5
PTU9-I	08-DEC-08	E601	0.57	1.5	<0.5	<0.5	<0.5	<1	0.84	<0.5	<0.5	13	<0.5
PTU9-E	07-OCT-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU9-E	19-NOV-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU9-E	08-DEC-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFE-SE ^k													
TFE-SW													
MTU03-I	16-OCT-08	E601	7.5	4.8	<0.5	1.4	5.9	5.3	0.72	7.3	<0.5	210	<0.5
MTU03-I	06-NOV-08	E601	7.6	4.8	<0.5	1.4	6.4	5.6	0.8	7.4	<0.5	200	<0.5
MTU03-I	04-DEC-08	E601	8.1	5.1	<0.5	1.5	6.1	5.8	0.78	7.2	<0.5	220	<0.5
MTU03-E	16-OCT-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU03-E	06-NOV-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU03-E	04-DEC-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFE-W													
MTU05-I	15-OCT-08	E601	<0.5	1	<0.5	<0.5	2.4	1.5	16	6	<0.5	35	0.62
MTU05-I	06-NOV-08	E601	<0.5	1.1	<0.5	<0.5	2.6	1.5	18	6.4	<0.5	36	0.66
MTU05-I	04-DEC-08	E601	<0.5	1	<0.5	<0.5	2.5	1.4	18	6.3	<0.5	35	0.65
MTU05-E	15-OCT-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU05-E	06-NOV-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CCI₄	CHCI ₃	1.1-DCA	1,2-DCA	1.1-DCE	1.2-DCE	Freon 113	PCE	1,1,1-TCA	TCE	Freon 11
	ошр.ос		<-	-	-	-	ug/L (ppb)	-	-	-	-	-	->
TFE-W (cont.)													
MTU05-E	04-DEC-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFG-1													
W-1111	07-OCT-08	E601	2.6	10	<0.5	< 0.5	1.2	<1	<0.5	1.3	< 0.5	3.9	<0.5
GTU01-I	20-NOV-08	E601	2.8	9.6	< 0.5	< 0.5	0.99	<1	0.5	1.5	< 0.5	4.7	<0.5
GTU01-I	18-DEC-08	E601	2.9	10	<0.5	<0.5	0.96	<1	0.5	1.4	<0.5	4	<0.5
GTU01-E	07-OCT-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU01-E	20-NOV-08	E601	< 0.5	1.1	< 0.5	< 0.5	< 0.5	<1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
GTU01-E	18-DEC-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFG-N ^I													
TF406 ^m													
PTU5-I	16-OCT-08	E601	<0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1	< 0.5	< 0.5	< 0.5	2.9	<0.5
PTU5-I	22-OCT-08	E601	<0.5	<0.5	<0.5	< 0.5	< 0.5	<1	< 0.5	< 0.5	< 0.5	6.6	<0.5
PTU5-I	23-OCT-08	E601	<0.5	<0.5	<0.5	< 0.5	< 0.5	<1	<0.5	< 0.5	<0.5	4.5	<0.5
PTU5-I	17-NOV-08	E601	<0.5	<0.5	<0.5	< 0.5	< 0.5	<1	<0.5	< 0.5	< 0.5	3.6	<0.5
PTU5-I	16-DEC-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	7.2	<0.5
PTU5-E	16-OCT-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU5-E	17-NOV-08	E601	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
PTU5-E	16-DEC-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TF406-NW ⁿ													
TF518-N°													
TF5475-1 ^p													
TF5475-2 ^q													
TF5475-3 ^r													

Notes on following page.

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Notes:

CCl₄ = Carbon tetrachloride

 $CHCl_3 = Chloroform$

1,1-DCA = 1,1-Dichloroethane

1,2-DCA = 1,2-Dichloroethane

1.1-DCE = 1.1-Dichloroethylene

1,2-DCE = 1,2-Dichloroethylene

Freon 113 = Trichlorotrifluoroethane

PCE = Tetrachloroethylene

1,1,1-TCA = 1,1,1-Trichloroethane

TCE = Trichloroethene

Freon 11 = Trichlorofluoromethane

VOC = volatile organic compound

Numbers in **BOLD** print indicate positive values above the detection limit.

^a TFA did not operate during reporting period due to multiple electronic control issues.

^b TFA-E did not operate in October due to possible electronic issues.

^c TFA-W was shut down in January after a year-long treatability test; W-404 is operational only during routine sample collection.

^d TFC-E did not operate during reporting period due to the budget reduction.

e TFC-SE did not operate during reporting period due to discharge pump issues which will be investigated and repaired as manpower and priorities allow.

f TFD did not operate during reporting period due to required maintenance. (A pre-start review will be conducted prior to restarting facility).

⁹ TFD-HPD did not operate during reporting period due to the budget reduction.

^h TFD-S did not operate during the month of October due to the budget reduction.

¹ TFE-E did not operate during reporting period due to a pending electronics evaluation to identify problem areas.

^j TFE-HS did not operate during reporting period due to insufficient resources to repair pump.

k TFE-SE did not operate during reporting period due to insufficient resources to replace pump. (The facility is the first priority for pump replacement).

¹ TFG-N did not operate during reporting period due to a pending electronics evaluation to identify needed repairs.

^m TF406 includes pre-startup extraction well sampling and monthly sampling results.

ⁿ TF406-NW did not operate during reporting period due to pump failure and insufficient resources to repair. (The facility is the third priority for pump replacement).

^o TF518-N did not operate during reporting period due to the budget reduction.

 $^{^{\}rm p}\,{\rm TF}5475\text{-}1$ did not operate during reporting period due to the budget reduction.

^q TF5475-2 did not operate during reporting period due to the budget reduction.

^r TF5475-3 did not operate during reporting period due to the budget reduction.

Table A-2. VOC analyses of samples from treatment facility extraction wells.

 Extraction Well	Date Sampled	Analytic Method	CCI ₄	CHCl ₃	1,1-DCA	1,2-DCA	1,1-DCE	1,2-DCE	Freon 113	PCE	1,1,1-TCA	TCE	Freon 11
	,		<-	-	-	, <u>-</u>	ug/L (ppb)	-	-	-	-	-	->
TFA ^a													
W-109 ^b	24-APR-08	E601	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1	0.51	2	< 0.5	< 0.5	<0.5
W-262 ^b	29-JAN-08	E601	< 0.5	< 0.5	<0.5	< 0.5	< 0.5	<1	< 0.5	0.56	< 0.5	< 0.5	< 0.5
W-408 ^b	24-APR-08	E601	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1	< 0.5	0.78	< 0.5	< 0.5	<0.5
W-415 ^b	24-APR-08	E601	< 0.5	1.2	0.84	< 0.5	1.8	<1	<0.5	14	< 0.5	1.2	<0.5
W-457 ^b	24-APR-08	E601	< 0.5	< 0.5	0.84	< 0.5	1.1	<1	< 0.5	8	< 0.5	< 0.5	<0.5
W-518 ^b	24-APR-08	E601	< 0.5	< 0.5	7.3	< 0.5	4	<1	<0.5	6.3	< 0.5	0.67	<0.5
W-522 ^b	24-APR-08	E601	< 0.5	< 0.5	2.3	< 0.5	1.5	<1	<0.5	3.5	< 0.5	< 0.5	<0.5
W-605 ^b	24-APR-08	E601	< 0.5	0.83	0.92	< 0.5	1.4	<1	<0.5	22	< 0.5	1.1	<0.5
W-614 ^b	24-APR-08	E601	< 0.5	0.84	<0.5	< 0.5	<0.5	<1	<0.5	8.2	< 0.5	< 0.5	< 0.5
W-712 ^b	24-APR-08	E601	3.2	3	1.2	< 0.5	3.7	<1	<0.5	1.6	< 0.5	3.6	< 0.5
W-714 ^b	06-MAY-08	E601	< 0.5	< 0.5	<0.5	< 0.5	<0.5	<1	<0.5	8.4	< 0.5	< 0.5	<0.5
W-903 ^b	29-JAN-08	E601	< 0.5	< 0.5	1.8	< 0.5	1.4	<1	<0.5	7.5	< 0.5	0.52	< 0.5
W-904 ^b	24-APR-08	E601	< 0.5	< 0.5	0.97	< 0.5	1.5	<1	<0.5	9.1	< 0.5	0.53	< 0.5
W-1001 ^b	24-APR-08	E601	< 0.5	< 0.5	<0.5	< 0.5	<0.5	<1	<0.5	< 0.5	< 0.5	< 0.5	< 0.5
W-1004 ^D	24-APR-08	E601	< 0.5	< 0.5	< 0.5	< 0.5	<0.5	<1	<0.5	4.2	< 0.5	< 0.5	< 0.5
W-1009 ^b	24-APR-08	E601	1.4	5.9	0.94	<0.5	4	<1	0.71	13	<0.5	2.3	<0.5
TFA-E													
W-254	19-NOV-08	E601	<0.5	<0.5	<0.5	<0.5	0.66	<1	<0.5	73	<0.5	1.8	<0.5
TFA-W													
W-404	18-DEC-08	E601	<0.5	<0.5	1.8	<0.5	2.5	<1	<0.5	10	<0.5	<0.5	<0.5
TFB													
W-357	09-OCT-08	E601	1.5	2.9	< 0.5	< 0.5	1.9	<1	5.9	1.4	< 0.5	42	<0.5
W-610	09-OCT-08	E601	< 0.5	< 0.5	< 0.5	< 0.5	3.2	<1	3.7	1.3	< 0.5	3.9	<0.5
W-620	09-OCT-08	E601	< 0.5	2	< 0.5	< 0.5	2.8	<1	3.4	2	< 0.5	8	<0.5
W-621	09-OCT-08	E601	< 0.5	0.8	<0.5	< 0.5	0.73	<1	1.4	< 0.5	< 0.5	4.8	<0.5
W-655	09-OCT-08	E601	< 0.5	0.77	< 0.5	< 0.5	<0.5	<1	3.1	< 0.5	< 0.5	2.8	<0.5
W-704	09-OCT-08	E601	0.61	3	<0.5	< 0.5	2.2	<1	5.2	3.4	< 0.5	27	<0.5
W-1423	09-OCT-08	E601	0.82	5.3	<0.5	<0.5	3.9	<1	3.4	1.9	<0.5	11	<0.5
TFC													
W-701	13-OCT-08	E601	< 0.5	3.2	< 0.5	< 0.5	2.9	<1	33	0.54	<0.5	11	0.52
W-1015	13-OCT-08	E601	< 0.5	0.67	< 0.5	< 0.5	1.1	<1	2.1	1.1	<0.5	4.9	<0.5
W-1102	13-OCT-08	E601	< 0.5	<0.5	< 0.5	< 0.5	0.68	<1	10	< 0.5	<0.5	2.6	3.2
W-1103	13-OCT-08	E601	<0.5	0.56	< 0.5	< 0.5	<0.5	<1	<0.5	< 0.5	<0.5	1.9	<0.5
W-1104	13-OCT-08	E601	< 0.5	0.98	< 0.5	< 0.5	0.56	<1	4.8	11	<0.5	25	<0.5
W-1116	13-OCT-08	E601	<0.5	1.7	<0.5	<0.5	0.55	<1	7	2.6	<0.5	4	<0.5

Table A-2. VOC analyses of samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CCI ₄	CHCl ₃	1,1-DCA	1 2-DCA	1,1-DCE	1 2-DCE	Freon 113	PCE	1,1,1-TCA	TCE	Freon 11
Well	Sampleu	Wethou	<-	- -	- -	1,2-DCA -	ug/L (ppb)	1,2-DCE -	-	-	1,1,1-1CA -	-	->
 TFC-E ^a													
W-368 ^b	08-JAN-08	E601	<0.5	11	<0.5	< 0.5	0.82	<1	18	2.3	<0.5	16	3.7
W-413 ^b	08-JAN-08	E601	<0.5	15	<0.5	<0.5	1.2	<1	11	<0.5	<0.5	8.1	3.7
TFC-SE ^a													
W-1213 ^b	08-APR-08	E601	< 0.5	4.4	< 0.5	< 0.5	2.7	<1	6.4	< 0.5	< 0.5	15	<0.5
W-2201 ^b	08-APR-08	E601	<0.5	9.5	<0.5	<0.5	2.4	<1	15	0.69	<0.5	19	1.2
TFD ^a ,													
W-351 ^b	03-APR-08	E601	5.3	1.1	< 0.5	0.99	3.9	<1	1.2	5.4	< 0.5	99	1.3
W-653 ^b	07-JUL-08	E601	40	12	< 0.5	< 0.5	1.5	<1	5.3	1.5	< 0.5	1400	<0.5
W-906 ^b	03-APR-08	E601	0.81	1.6	< 0.5	< 0.5	<0.5	<1	< 0.5	< 0.5	< 0.5	3.4	1.9
W-907-2 ^b	07-JUL-08	E601	0.99	3.2	< 0.5	< 0.5	1.3	<1	< 0.5	1.7	< 0.5	29	<0.5
W-1206 ^b	07-JUL-08	E601	0.87	1.6	< 0.5	< 0.5	0.66	<1	< 0.5	0.52	< 0.5	19	<0.5
W-1208 ^D	07-JUL-08	E601	3.1	2.2	< 0.5	< 0.5	0.6	<1	0.63	0.93	< 0.5	64	53
W-2011 ^b	04-APR-07	E601	3.1	2.2	< 0.5	< 0.5	< 0.5	<1	< 0.5	< 0.5	< 0.5	77	<0.5
W-2101 ^b	04-APR-07	E601	17	5.2	< 0.5	< 0.5	0.68	<1	2.7	0.83	< 0.5	450	<0.5
W-2102 ^b	04-APR-07	E601	28	9.7	<0.5	<0.5	0.74	<1	3.6	0.77	<0.5	840	1.8
TFD-E													
W-1253 ^{bc}	11-FEB-08	E601	6	6.2	<5	<5	16	<10	17	12	<5	2300	<5
W-1255 ^b	11-FEB-08	E601	4.4	2	< 0.5	< 0.5	<0.5	<1	< 0.5	< 0.5	< 0.5	260	<0.5
W-1301	14-OCT-08	E601	5	2.7	3.2	11	84	1.2	0.66	46	< 0.5	460	<0.5
W-1303	14-OCT-08	E601	3	2.9	0.8	3.1	7.2	<1	< 0.5	6.7	< 0.5	150	23
W-1306	14-OCT-08	E601	4.6	1.6	< 0.5	< 0.5	< 0.5	<1	< 0.5	1.8	< 0.5	100	<0.5
W-1307	14-OCT-08	E601	1.6	< 0.5	< 0.5	< 0.5	< 0.5	<1	< 0.5	< 0.5	< 0.5	24	<0.5
W-1404	17-OCT-08	E601	< 0.5	3.1	4.8	37	24	7.3	< 0.5	98	< 0.5	360	<0.5
W-1550	14-OCT-08	E601	16	3.5	< 0.5	< 0.5	2.3	<1	1.4	11	<0.5	170	<0.5
W-2006	14-OCT-08	E601	1.3	2.4	2.9	9.5	88	1.3	<0.5	83	<0.5	690	<0.5
W-2203	14-OCT-08	E601	16	2.4	<0.5	<0.5	3.2	<1	3.4	7.5	<0.5	150	<0.5
TFD-HPD ^a													
W-1254 ^b	04-OCT-07	E601	0.88	< 0.5	< 0.5	< 0.5	< 0.5	<1	< 0.5	< 0.5	< 0.5	14	<0.5
W-1551 ^b	04-OCT-07	E601	11	4.4	< 0.5	< 0.5	1.6	<1	3	3.1	< 0.5	210	<0.5
W-1552 ^b	20-DEC-07	E601	< 0.5	0.96	< 0.5	< 0.5	<0.5	<1	< 0.5	< 0.5	< 0.5	22	<0.5
W-1650 ^b	20-DEC-07	E601	7.1	1.8	< 0.5	< 0.5	< 0.5	<1	2.6	<0.5	<0.5	260	<0.5
W-1651 ^b	20-DEC-07	E601	1.3	1.1	< 0.5	< 0.5	< 0.5	<1	0.61	< 0.5	<0.5	64	<0.5
W-1652 ^D	18-DEC-07	E601	3	2	< 0.5	< 0.5	< 0.5	3.7	1	0.54	<0.5	420	<0.5
W-1653 ^D	18-DEC-07	E601	1.4	0.9	< 0.5	< 0.5	< 0.5	<1	<0.5	< 0.5	<0.5	74	<0.5
W-1654 ^b	18-DEC-07	E601	<0.5	0.55	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	25	<0.5

Table A-2. VOC analyses of samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CCI ₄	CHCI ₃	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113	PCE -	1,1,1-TCA -	TCE -	Freon 11
TFD-HPD (cont.)													
W-1655 ^b	18-DEC-07	E601	0.62	0.94	<0.5	< 0.5	<0.5	<1	<0.5	1	< 0.5	49	< 0.5
W-1656 ^b	18-DEC-07	E601	2.5	0.97	<0.5	< 0.5	<0.5	<1	0.88	< 0.5	< 0.5	100	< 0.5
W-1657 ^b	18-DEC-07	E601	12	5.1	<0.5	<0.5	<0.5	<1	4.2	0.52	<0.5	1200	<0.5
TFD-S													
W-1503	21-NOV-08	E601	9.3	2.6	0.87	0.59	23	<1	3.7	7.6	< 0.5	440	2.1
W-1504	21-NOV-08	E601	<0.5	< 0.5	< 0.5	< 0.5	14	<1	4.1	22	< 0.5	100	< 0.5
W-1510	21-NOV-08	E601	<0.5	<0.5	<0.5	<0.5	0.87	<1	<0.5	1.5	<0.5	16	<0.5
TFD-SE													
W-314 ^b	07-JAN-08	E601	1.6	8.9	0.72	1.7	11	<1	5	21	< 0.5	170	< 0.5
W-1308	15-OCT-08	E601	< 0.5	1.2	1.4	6.3	17	1	< 0.5	100	< 0.5	150	< 0.5
W-1403 ^b	02-JUL-08	E601	2.9	19	1.5	6.6	51	<1	3.9	98	< 0.5	430	<0.5
W-1904 ^b	26-DEC-07	E601	<0.5	< 0.5	0.54	0.67	5.8	<1	< 0.5	39	< 0.5	42	< 0.5
W-2005	15-OCT-08	E601	1.3	1.2	1.2	3.6	38	<1	< 0.5	84	< 0.5	210	<0.5
SIP-ETC-201 ^b	26-DEC-07	E601	<0.5	0.55	0.59	1.1	8.5	<1	<0.5	59	<0.5	60	<0.5
TFD-SS													
W-1523	07-OCT-08	E601	4.2	3.8	<0.5	1.6	13	<1	1.4	20	< 0.5	150	<0.5
W-1601	07-OCT-08	E601	3.8	4.2	1.9	6.8	30	1.3	1.4	93	< 0.5	270	< 0.5
W-1602	07-OCT-08	E601	< 0.5	2	<0.5	< 0.5	0.57	<1	< 0.5	0.72	< 0.5	14	16
W-1603 ^b	11-APR-08	E601	1.6	2	1.2	4.8	16	1.2	<0.5	33	<0.5	170	8.6
TFD-W													
W-1215 ^b	15-JUL-08	E601	< 0.5	6.5	< 0.5	< 0.5	< 0.5	<1	< 0.5	< 0.5	< 0.5	5.6	34
W-1216	08-OCT-08	E601	< 0.5	4.2	< 0.5	< 0.5	< 0.5	<1	< 0.5	< 0.5	< 0.5	6	65
W-1902	08-OCT-08	E601	0.62	3.3	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	9.1	92
TFE-E ^a													
W-566 ^b	09-APR-08	E601	0.71	6.7	< 0.5	< 0.5	3.5	<1	9.4	4.4	< 0.5	58	< 0.5
W-1109 ^b	09-APR-08	E601	< 0.5	0.58	0.51	< 0.5	43	<1	7.9	71	< 0.5	200	< 0.5
W-1903 ^b	30-JUL-07	E601	< 0.5	< 0.5	< 0.5	< 0.5	23	<1	11	21	< 0.5	36	< 0.5
W-1909 ^b	30-JUL-07	E601	< 0.5	< 0.5	<0.5	< 0.5	35	<1	10	48	< 0.5	58	< 0.5
W-2305 ^b	30-JUL-07	E601	<0.5	1.1	1.5	<0.5	99	<1	21	170	<0.5	380	<0.5
TFE-HS ^a													
W-2012 ^b	09-APR-08	E601	1.9	1.8	< 0.5	< 0.5	9	2.9	7.9	15	<0.5	260	<0.5
W-2105 ^b	09-APR-08	E601	< 0.5	1.4	< 0.5	< 0.5	3.2	1.4	4.4	14	<0.5	440	< 0.5

Table A-2. VOC analyses of samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CCI₄	CHCI ₃	1.1 DCA	4.2 DCA	1,1-DCE	4.2 DCE	Freon 113	PCE	1,1,1-TCA	TCE	Eroon 11
weii	Sampleu	Wethou	<-	- -	1,1-DCA -	1,2-DCA -	ug/L (ppb)	1,2-DGE -	-	-	1,1,1-1CA -	-	Freon 11 ->
TFE-NW													
W-1211	07-OCT-08	E601	0.5	1.3	< 0.5	< 0.5	<0.5	<1	0.77	< 0.5	<0.5	12	<0.5
W-1409 ^b	10-APR-08	E601	<0.5	<0.5	<0.5	<0.5	1.2	<1	0.57	1.7	<0.5	30	<0.5
TFE-SE ^a													
W-359 ^b	09-JAN-08	E601	4.1	0.69	< 0.5	<0.5	10	<1	9.3	8.7	<0.5	100	0.91
TFE-SW													
W-1518 ^b	14-JUL-08	E601	<0.5	0.6	< 0.5	< 0.5	1.9	2.2	1.9	1.1	< 0.5	17	< 0.5
W-1520	16-OCT-08	E601	3.9	6.4	<0.5	1.4	1.5	88	< 0.5	3.8	< 0.5	100	<0.5
W-1522	16-OCT-08	E601	8.1	4.9	<0.5	1.4	6	5.4	0.77	8.1	<0.5	220	< 0.5
TFE-W													
W-292	15-OCT-08	E601	<0.5	0.82	<0.5	< 0.5	1	2.9	1.6	1.3	< 0.5	24	<0.5
W-305	15-OCT-08	E601	<0.5	1.2	<0.5	<0.5	3.4	<1	25	9.6	<0.5	41	1
TFG-1													
W-1111	07-OCT-08	E601	2.6	10	<0.5	<0.5	1.2	<1	<0.5	1.3	<0.5	3.9	<0.5
TFG-N ^a													
W-1806 ^b	09-APR-08	E601	< 0.5	2.4	<0.5	< 0.5	< 0.5	<1	< 0.5	12	< 0.5	2.4	<0.5
W-1807 ^b	10-APR-08	E601	<0.5	2	<0.5	<0.5	1.5	<1	1.5	16	<0.5	5.4	<0.5
TF406													
W-1309	16-OCT-08	E601	< 0.5	< 0.5	<0.5	< 0.5	< 0.5	<1	< 0.5	< 0.5	< 0.5	8.4	<0.5
W-1310	16-DEC-08	E601	<0.5	< 0.5	<0.5	< 0.5	<0.5	<1	<0.5	< 0.5	< 0.5	7	<0.5
GSW-445	16-OCT-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	2.9	<0.5
TF406-NW ^a													
W-1801 ^b	28-APR-08	E601	<0.5	2.3	<0.5	<0.5	<0.5	<1	5.4	0.74	<0.5	23	<0.5
TF518-N ^a													
W-1410 ^b	23-JAN-08	E601	2.8	1.5	<0.5	<0.5	<0.5	<1	<0.5	0.83	<0.5	18	<0.5
TF518-PZ ^d													
W-1615 ^b	07-FEB-08	E601	0.58	0.84	<0.5	< 0.5	3	<1	<0.5	42	<0.5	130	<0.5
W-518-1913 ^b	07-FEB-08	E601	<0.5	<0.5	<0.5	<0.5	7.5	<1	<0.5	18	<0.5	34	<0.5
W-518-1914 ^b	07-FEB-08	E601	<0.5	< 0.5	<0.5	< 0.5	<0.5	<1	<0.5	20	<0.5	5.6	<0.5
W-518-1915 ^{bc}	07-FEB-08	E601	<25	<25	<25	<25	180	<50	<25	1500	<25	12000	<25
SVB-518-201 ^b	07-FEB-08	E601	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1	< 0.5	35	< 0.5	8.5	<0.5

Table A-2. VOC analyses of samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CCI ₄	CHCI ₃	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)		Freon 113	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TF518-PZ (cont.) SVB-518-204 ^b	07-FEB-08	E601	<0.5	0.63	<0.5	<0.5	1.4	<1	<0.5	43	<0.5	550	<0.5
TF5475-1^a W-1302-2 ^b	18-JUL-07	E601	1.8	19	0.73	3.4	20	<1	7.4	41	<0.5	260	<0.5
TF5475-2^a W-1108 ^b W-1415 ^b	16-JAN-08 16-JAN-08	E601 E601	2 0.71	39 3.9	0.79 <0.5	3.1 <0.5	18 8.4	<1 <1	5.9 2.1	45 9.8	<0.5 <0.5	440 76	<0.5 <0.5
TF5475-3^a W-1604 ^b W-1605 ^b W-1608 ^b	21-AUG-07 21-AUG-07 21-AUG-07	E601 E601 E601	2.9 1.3 <0.5	29 13 9.5	0.94 <0.5 0.71	5.2 5.7 3.2	23 7.2 2.1	<1 1.2 3.2	17 4 1.8	45 21 7.1	<0.5 <0.5 <0.5	390 210 69	<0.5 <0.5 <0.5
W-1609 ^b	21-AUG-07	E601	<0.5	13	0.55	9.4	2.7	<1	0.94	7.9	<0.5	62	<0.5

Notes on following page.

Table A-2. VOC analyses of samples from treatment facility extraction wells.

Notes:

 CCl_4 = Carbon tetrachloride

 $CHCl_3 = Chloroform$

1,1-DCA = 1,1-Dichloroethane

1,2-DCA = 1,2-Dichloroethane

1,1-DCE = 1,1-Dichloroethylene

1,2-DCE = 1,2-Dichloroethylene

Freon 113 = Trichlorotrifluoroethane

PCE = Tetrachloroethylene

1,1,1-TCA = 1,1,1-Trichloroethane

TCE = Trichloroethene

Freon 11 = Trichlorofluoromethane

VOC = volatile organic compound

Numbers in **BOLD** print indicate positive values above the detection limit.

^a Treatment Facility did not operate during reporting period. Please refer to Table A-1 for details.

^b Most recent VOC sample results available.

^c Elevated detection limit due to dilution.

^d No ground water was extracted from TF518-PZ wells during reporting period.

Table A-3. VOC analyses of vapor samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CCI ₄	CHCI ₃	1,1-DCA	1,2-DCA	1,1-DCE	1,2-DCE	Freon 113	PCE	1,1,1-TCA	TCE	Freon 11
			<-	•	-	•	PPM(V/V)	•		-	-	-	->
VTFD-ETÇS ^a													
W-1904 ^b	26-JUN-07	TO15DI	< 0.02	< 0.02	< 0.02	< 0.02	0.12	< 0.02	< 0.02	2.2	< 0.02	0.64	< 0.02
W-ETC-2003 ^b	12-JUL-07	TO15DI	<0.008	<0.008	<0.008	<0.008	0.022	<0.008	<0.008	1.1	<0.008	0.26	<0.008
W-ETC-2004Ab	12-JUL-07	TO15DI	<0.01	<0.01	<0.01	<0.01	0.021	<0.01	<0.01	1.6	< 0.01	0.5	<0.01
W-ETC-2004Bb	12-JUL-07	TO15DI	< 0.02	< 0.02	< 0.02	< 0.02	0.18	< 0.02	< 0.02	3.3	< 0.02	1.7	< 0.02
SIP-ETC-201 ^b	12-JUL-07	TO15DI	<0.01	<0.01	0.023	<0.01	0.054	<0.01	<0.01	1.6	<0.01	8.0	<0.01
VTFD-HPD ^c													
W-1552 ^b	13-FEB-07	TO15DI	<0.005	< 0.005	< 0.005	< 0.005	<0.005	< 0.005	< 0.005	0.011	<0.005	0.2	< 0.005
W-1650 ^b	03-JUL-07	TO15DI	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
W-1651 ^b	03-JUL-07	TO15DI	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
W-1652 ^b	03-JUL-07	TO15DI	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
W-1653 ^b	03-JUL-07	TO15DI	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
W-1654 ^D	03-JUL-07	TO15DI	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
W-1655 ^b	03-JUL-07	TO15DI	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
W-1656 ^b	03-JUL-07	TO15DI	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
W-1657 ^D	03-JUL-07	TO15DI	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
W-HPA-002B ^b	03-JUL-07	TO15DI	0.032	0.024	< 0.0057	< 0.0057	0.011	< 0.0057	<0.0057	0.1	<0.0057	1	< 0.0057
VTFD-HS ^d													
W-653 ^b	15-FEB-07	TO15DI	<0.005	< 0.005	< 0.005	< 0.005	<0.005	< 0.005	< 0.005	<0.005	<0.005	0.093	< 0.005
W-2011 ^b	15-FEB-07	TO15DI	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.081	< 0.005
W-2101 ^b	15-FEB-07	TO15DI	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.061	<0.005
W-2102 ^b	15-FEB-07	TO15DI	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.11	< 0.005
VTFE-ELM ^e													
W-1903 ^b	16-AUG-07	TO15DI	<0.0084	<0.0084	<0.0084	<0.0084	1.4	<0.0084	0.36	1.4	<0.0084	1.5	<0.0084
W-1909 ^b W-2305 ^b	16-JUL-07 16-AUG-07	TO15DI TO15DI	<0.008 <0.005	<0.008 <0.005	<0.008 <0.005	<0.008 <0.005	1.2 0.014	<0.008 <0.005	0.36 0.016	0.04 0.064	<0.008 <0.005	0.19 0.069	<0.008 <0.005
W-543-001 ^b	05-FEB-08	TO15DI	<0.005	<0.005	<0.005	<0.005	0.014	<0.005	< 0.005	0.064	<0.005	0.069	<0.005 <0.005
W-543-003 ^b	05-FEB-08	TO15DI	< 0.005	0.0069	<0.005	< 0.005	0.0090	< 0.005	0.012	0.13	<0.005	0.038	<0.005
W-543-1908 ^b	05-FEB-08	TO15DI	<0.005	< 0.005	<0.005	<0.005	< 0.005	< 0.005	< 0.005	0.015	<0.005	0.023	<0.005
	00 . 25 00	101021	10.000	10.000	10.000	10.000	10.000	10.000	10.000	0.0.0	10.000	0.020	10.000
VTFE-HS ^f													
W-ETS-2008Ab	30-JAN-08	TO15DI	< 0.005	<0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.031	< 0.005	0.057	<0.005
W-ETS-2008B	05-FEB-08	TO15DI	<0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.015	0.14	< 0.005	0.4	<0.005
W-ETS-2009 ^b	30-JAN-08	TO15DI	<0.005	< 0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.062	< 0.005	0.092	< 0.005
W-ETS-2010A ^b	30-JAN-08	TO15DI	<0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	<0.005	0.046	< 0.005	0.096	< 0.005
W-ETS-2010B ^b W-2105 ^b	30-JAN-08	TO15DI	<0.005	< 0.005	< 0.005	< 0.005	0.021	0.0054	0.058	0.37	< 0.005	1	<0.005
VV-21U5	30-JAN-08	TO15DI	<0.005	<0.005	<0.005	<0.005	0.014	<0.005	0.01	0.022	<0.005	0.13	< 0.005

Table A-3. VOC analyses of vapor samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CCI ₄	CHCI ₃	1,1-DCA -	1,2-DCA -	1,1-DCE PPM(V/V)	1,2-DCE -	Freon 113	PCE -	1,1,1-TCA -	TCE -	Freon 11
VTF406-ḤS ^g													
W-217 ^b	26-JUN-08	TO15DI	0.33	0.037	0.015	< 0.005	2	0.013	0.38	2.9	< 0.005	2.8	< 0.005
W-514-2007A,b	26-JUN-08	TO15DI	0.018	< 0.005	< 0.005	< 0.005	0.012	< 0.005	0.01	0.066	< 0.005	0.37	0.19
W-514-2007B ^b	26-JUN-08	TO15DI	0.11	0.018	0.0096	< 0.005	1	0.01	0.082	1.4	< 0.005	2.7	0.016
VTF511 ^h													
W-274 ^b	04-OCT-06	TO15DI	0.14	0.02	<0.0062	<0.0062	0.07	<0.0062	0.014	0.33	<0.0062	6.1	0.38
W-1517 ^b	20-DEC-07	TO15DI	0.0066	< 0.005	<0.005	< 0.005	0.0068	< 0.005	< 0.005	0.022	< 0.005	0.65	0.016
W-2204 ^b	01-AUG-07	TO15DI	0.089	0.069	<0.00	0.091	0.039	<0.00	<0.02	0.26	<0.02	3.4	<0.02
W-2206 ^b	01-AUG-07	TO15DI	0.024	0.057	<0.02	0.25	< 0.02	<0.02	<0.02	0.27	<0.02	2.9	<0.02
W-2207A,b	26-FEB-08	TO15DI	< 0.005	< 0.005	< 0.005	< 0.005	0.0066	< 0.005	< 0.005	0.0064	< 0.005	1.9	< 0.005
W-2207B, ^b	07-AUG-08	TO15DI	0.032	0.023	<0.0062	<0.0062	0.083	<0.0062	<0.0062	0.044	<0.0062	4.2	<0.0062
W-2208A,b	26-FEB-08	TO15DI	0.18	0.047	< 0.002	<0.02	0.37	< 0.02	0.032	0.11	<0.02	15	0.75
W-2208B ^b	07-AUG-08	TO15DI	0.56	0.18	0.17	< 0.072	3.6	0.11	0.19	1.8	< 0.072	58	0.19
W-2205 ^b	01-AUG-07	TO15DI	0.087	0.14	<0.031	0.035	0.056	<0.031	<0.031	0.19	<0.031	5.5	<0.031
VTF518-PZ ⁱ													
W-1615 ^b	15-JAN-08	TO15DI	0.1	<0.025	<0.025	<0.025	0.96	<0.025	0.96	8.7	< 0.025	17	<0.025
W-518-1913 ^b	15-JAN-08	TO15DI	0.012	0.023	0.023	< 0.025	1.7	<0.025	0.063	2	<0.025	4.5	<0.025
W-518-1914 ^b	15-JAN-08	TO15DI	< 0.005	< 0.005	< 0.007	< 0.005	<0.005	<0.005	< 0.005	0.98	<0.005	0.28	<0.005
W-518-1915 ^b	15-JAN-08	TO15DI	<0.006	<0.006	<0.006	<0.0066	0.29	<0.0066	0.01	1.6	<0.0066	5.9	<0.0066
SVB-518-201 ^b	15-JAN-08	TO15DI	<0.005	<0.005	<0.005	< 0.005	0.016	<0.005	<0.005	3.9	<0.005	0.34	<0.005
SVB-518-204 ^b	15-JAN-08	TO15DI	<0.02	<0.02	<0.02	<0.02	0.051	<0.02	<0.02	2.4	<0.02	15	<0.02
VTF5475 ^J													
W-ETS-507 ^b	06-SEP-07	TO15DI	< 0.005	0.85	<0.005	0.62	< 0.005	<0.005	<0.005	0.15	<0.005	0.67	<0.005
W-1605 ^b	06-SEP-07	TO15DI	0.0069	0.17	< 0.005	0.15	0.11	< 0.005	0.036	0.1	< 0.005	0.85	<0.005
W-1608 ^b	06-SEP-07	TO15DI	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	<0.005	< 0.005	< 0.005	0.0061	<0.005
W-2211 ^b	12-OCT-07	TO15DI	< 0.005	0.49	0.012	0.15	0.14	< 0.005	0.01	0.11	< 0.005	1.2	<0.005
W-2212 ^b	12-OCT-07	TO15DI	0.056	0.75	0.024	0.039	1.1	< 0.005	0.16	0.66	< 0.005	3.8	<0.005
W-2302 ^b	05-OCT-07	TO15DI	0.032	0.47	0.022	< 0.017	0.73	<0.017	0.063	0.86	<0.017	11	<0.017
W-2303 ^b	05-OCT-07	TO15DI	0.009	0.88	0.038	0.083	0.4	< 0.005	0.0088	0.36	< 0.005	3.7	<0.005
SVI-ETS-504 ^b	12-OCT-07	TO15DI	<0.005	0.32	0.0052	0.14	0.073	<0.005	<0.005	0.064	<0.005	0.34	<0.005

Notes on following page.

Table A-3. VOC analyses of vapor samples from treatment facility extraction wells.

^a VTFD-ETCS did not operate during reporting period due to the budget reduction.

Notes:

CCl₄ = Carbon tetrachloride

 $CHCl_3 = Chloroform$

1,1-DCA = 1,1-Dichloroethane

1,2-DCA = 1,2-Dichloroethane

1,1-DCE = 1,1-Dichloroethylene

1,2-DCE = 1,2-Dichloroethylene

Freon 113 = Trichlorotrifluoroethane

PCE = Tetrachloroethylene

1,1,1-TCA = 1,1,1-Trichloroethane

TCE = Trichloroethene

Freon 11 = Trichlorofluoromethane

VOC = volatile organic compound

Numbers in **BOLD** print indicate positive values above the detection limit.

^b Most recent VOC vapor sample results available.

 $^{^{\}rm c}\,{\rm VTFD\text{-}HPD}$ did not operate during reporting period due to the budget reduction.

^d VTFD-HS did not operate during reporting period due to the budget reduction.

^e VTFE-ELM did not operate during reporting period due to the budget reduction.

 $^{^{\}rm f}$ VTFE-HS did not operate during reporting period due to the budget reduction.

⁹ VTF406-HS did not operate during reporting period due to recent flow totals being suspect.

h VTF511 did not operate during reporting period due to electronic operating system issues which will be investigated and repaired as manpower and priorities allow.

ⁱ VTF518-PZ did not operate during reporting period due to the budget reduction.

^j VTF5475 did not operate during reporting period due to the budget reduction.

Table A-4. Chromium analyses of influent, effluent and receiving water samples by treatment facility.

Treatment Facility	Sample	Date	Chromium (total) ^a	Hexavalent Chromium
	Station	Sampled	mg/L (ppm)	mg/L (ppm)
TFB	TFB-E002	09-OCT-08	0.022	NA
	TFB-E002	04-NOV-08	0.019	NA
TFC	TFB-E002	02-DEC-08	0.014	NA
	TFC-E003	13-OCT-08	0.026	NA
110	TFC-E003	04-NOV-08	0.024	NA
	TFC-E003	02-DEC-08	0.016	NA
TF406	PTU5-I	22-DEC-08	0.015	NA
	PTU5-E	22-DEC-08	0.015	NA

^aA discharge limit of 0.050 ppm is set for total chromium during the dry season (April 1-November 30), and no limit is set for total chromium for the wet season (December 1-March 31); however, a limit of 0.022 ppm hexavalent chromium applies during the wet season. Discharge limits are defined in the Explanation of Significant Differences for metals discharge limits (April 1997).

Shaded values exceeded the discharge limit. See text for explanation.

Table A-5. Bioassay, turbidity, and chloride analyses of influent and effluent samples by treatment facility.

Treatment Facility	Sample Station	Date Sampled	Aquatic Bioassay ^a Percent Survival	Turbidity Nephelometric Turbidity Units (NTU)	Chloride (mg/L)
TF406	PTU5-E	22-DEC-08	100 (100)	NA	NA

^aTest species was Fathead minnow and the test duration was 96 hours.

Percent survival in the control group samples shown in parentheses.

Note: NA = not applicable

Explanation of Abbreviations

TFA-I001 is a sampling port located immediately prior to the TFA Treatment System.

TFA-E001 is a sampling port located immediately after the TFA Treatment System, at the beginning of the discharge pipeline.

TFA receiving water is routinely sampled at the TFG-ASW location.

TFA-W-I is an influent sampling port prior to the sediment bag filter immediately following W-404.

TFA-W-E is an effluent sampling port immediately following the sediment bag filter; the water is then discharged to the Livermore Water Reclamation Plant (LWRP).

TFB-I002 is a sampling port located immediately prior to the TFB Treatment System.

TFB-E002 is a sampling port located immediately after the TFB Treatment System, at the beginning of the discharge pipeline.

TFB-R002 is a sampling station in the drainage ditch north of TFB, located approximately 75 ft downstream from the discharge point.

TFC-I003 is a sampling port located immediately prior to the TFC Treatment System.

TFC-E003 is a sampling port located immediately after the TFC Treatment System, at the beginning of the discharge pipeline.

TFC-R003 is a sampling station in Arroyo Las Positas, located approximately 75 ft downstream from the TFC discharge point.

TFD-I004 is a sampling port located immediately prior to the TFD Treatment System.

TFD-E004 is a sampling port located immediately after the TFD Treatment System, prior to discharge to the Drainage Retention Basin or to the underground discharge pipeline leading to Arroyo Las Positas.

TFD-R004 is now combined with and collected at the TFC-R003 location. Results are reported under TFC-R003, as approved by the RWQCB.

CRD1-I is a sampling port located immediately prior to the catalytic column in the Catalytic Reductive Dehalogenation treatment unit 1 (CRD1).

CRD1-E is the effluent from the catalytic column in the Catalytic Reductive Dehalogenation treatment unit 1 (CRD1) and then reinjected at W-1302.

CRD2-I is a sampling port located immediately prior to the catalytic columns in the Catalytic Reductive Dehalogenation treatment unit 2 (CRD2).

CRD2-E is the effluent from the last catalytic column in the Catalytic Reductive Dehalogenation treatment unit 2 (CRD2) and then reinjected at W-1610.

GTU01-l is a sampling port located immediately prior to GTU01, which is currently operating in the TFG-1 area.

GTU01-E is a sampling port located immediately after GTU01, which is currently operating in the TFG-1 area.

GTU01 receiving water is routinely sampled at the TFG-ASW location.

GTU03-I is a sampling port located immediately prior to GTU03, which is currently operating in the TF406 Northwest area.

GTU03-E is a sampling port located immediately after GTU03, which is currently operating in the TF406 Northwest area.

GTU03 receiving water is routinely sampled at the TFC-R003 location.

GTU07-I is a sampling port located immediately prior to GTU07, which is currently operating in the TFE Hotspot area.

GTU07-E is a sampling port located immediately after GTU07, which is currently operating in the TFE Hotspot area.

GTU07 receiving water is routinely sampled at the TFC-R003 location.

GTU09-I is a sampling port located immediately prior to GTU09, which is currently operating in the TF5475 area.

GTU09-E is a sampling port located immediately after GTU09, which is currently operating in the TF5475 area.

GTU09 receiving water is routinely sampled at the TFC-R003 location.

MTU02-I is a sampling port located immediately prior to MTU02, which is currently operating in the TFG North area.

MTU02-E is a sampling port located immediately after MTU02, which is currently operating in the TFG North area.

MTU02 receiving water is routinely sampled at the TFC-R003 location.

MTU03-I is a sampling port located immediately prior to MTU03, which is currently operating in the TFE Southwest area.

MTU03-E is a sampling port located immediately after MTU03, which is currently operating in the TFE Southwest area.

MTU03 receiving water is routinely sampled at the TFC-R003 location.

MTU04-I is a sampling port located immediately prior to MTU04, which is currently operating in the TFE Southeast area.

MTU04-E is a sampling port located immediately after MTU04, which is currently operating in the TFE Southeast area.

MTU04 receiving water is routinely sampled at the TFC-R003 location.

MTU05-I is a sampling port located immediately prior to MTU05, which is currently operating in the TFE West area.

MTU05-E is a sampling port located immediately after MTU05, which is currently operating in the TFE West area.

MTU05 receiving water is routinely sampled at the TFC-R003 location.

Explanation of Abbreviations

MTU1-I is a sampling port located immediately prior to MTU1, which is currently operating in the TFC East area.

MTU1-E is a sampling port located immediately after MTU1, which is currently operating in the TFC East area.

MTU1 receiving water is routinely sampled at the TFC-R003 location.

PTU1-I is a sampling port located immediately prior to PTU-1, which is currently operating in the TFC Southeast area.

PTU1-E is a sampling port located immediately after PTU-1, which is currently operating in the TFC Southeast area.

PTU1 receiving water is routinely sampled at the TFC-R003 location.

PTU2-I is a sampling port located immediately prior to PTU-2, which is currently operating in the TFD South area.

PTU2-E is a sampling port located immediately after PTU-2, which is currently operating in the TFD South area.

PTU2 receiving water is routinely sampled at TFC-R003 during the wet season.

PTU3-I is a sampling port located immediately prior to PTU-3, which is currently operating in the TFE East area.

PTU3-E is a sampling port located immediately after PTU-3, which is currently operating in the TFE East area.

PTU3 receiving water is routinely sampled at the TFC-R003 location.

PTU5-I is a sampling port located immediately prior to PTU-5, which is currently operating in the TF406 extraction location.

PTU5-E is a sampling port located immediately after PTU-5, which is currently operating in the TF406 extraction location.

PTU5 receiving water is routinely sampled at the TFC-R003 location.

PTU6-I is a sampling port located immediately prior to PTU-6, which is currently operating in the TFD West area.

PTU6-E is a sampling port located immediately after PTU-6, which is currently operating in the TFD West area.

PTU6 receiving water is routinely sampled at the TFC-R003 location.

PTU8-I is a sampling port located immediately prior to PTU-8, which is currently operating in the TFD East area.

PTU8-E is a sampling port located immediately after PTU-8, which is currently operating in the TFD East area.

PTU8 receiving water is routinely sampled at the TFC-R003 location.

PTU9-I is a sampling port located immediately prior to PTU-9, which is currently operating in the TFE Northwest area.

PTU9-E is a sampling port located immediately after PTU-9, which is currently operating in the TFE Northwest area.

PTU9 receiving water is routinely sampled at the TFC-R003 location.

PTU10-I is a sampling port located immediately prior to PTU-10, which is currently operating in the TFD Helipad area.

PTU10-E is a sampling port located immediately after PTU-10, which is currently operating in the TFD Helipad area.

PTU10 receiving water is routinely sampled at the TFC-R003 location.

PTU11-I is a sampling port located immediately prior to PTU-11, which is currently operating in the TFD Southeast area.

PTU11-E is a sampling port located immediately after PTU-11, which is currently operating in the TFD Southeast area.

PTU11 receiving water is routinely sampled at the TFC-R003 location.

PTU12-I is a sampling port located immediately prior to PTU-12, which is currently operating in the TFD Southshore area.

PTU12-E is a sampling port located immediately after PTU-12, which is currently operating in the TFD Southshore area.

PTU12 receiving water is routinely sampled at the TFC-R003 location.

STU06-I is a sampling port located immediately prior to STU06, which is operating in the TFA East area.

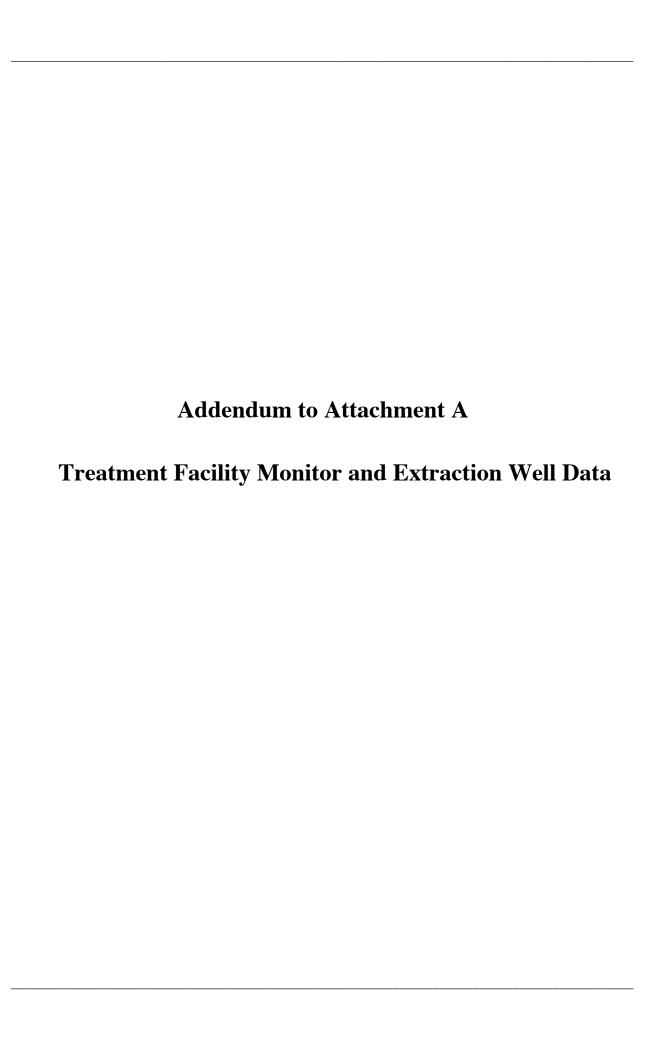
STU06-E is a sampling port located immediately after STU06, which is operating in the TFA East area.

STU06 receiving water is routinely sampled at the TFG-ASW location.

STU09-I is a sampling port located immediately prior to STU09, which is currently operating in the TF518-North area.

STU09-E is a sampling port located immediately after STU09, which is currently operating in the TF518-North area.

STU09 receiving water is routinely sampled at the TFC-R003 location.



Addendum. VOC analyses for nearby monitor wells and extraction wells associated with treatment facilities restarted during the 4th quarter of 2008.

 Sample	Date	Analytic											
Station	Sampled	Method	CCI4	CHCI3	1,1-DCA	1,2-DCA	1,1-DCE	1,2-DCE	Freon 113	PCE	1,1,1-TCA	TCE	Freon 11
			<-	-	-	-	ug/L (ppb)	-	-	-	-	-	->
TFA-E													
W-254ª	8-Jul-08	E601	<0.5	<0.5	0.61	<0.5	0.97	<1	<0.5	65	<0.5	1.7	<0.5
W-254ª	19-Nov-08	E601	<0.5	0.54	0.6	<0.5	0.66	<1	<0.5	73	<0.5	1.8	<0.5
TF406													
W-1309ª	12-May-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	6.5	<0.5
W-1309 ^a	16-Oct-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	8.4	<0.5
W-1310 ^a	29-Jan-08	E601	<0.5	0.86	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	7.2	<0.5
W-1310 ^a	16-Oct-08	E601	0.51	1	<0.5	<0.5	0.59	<1	0.68	<0.5	<0.5	4.3	<0.5
W-1310 ^a	17-Nov-08	E601	0.52	0.9	<0.5	<0.5	<0.5	<1	0.62	<0.5	<0.5	3.8	<0.5
W-1310ª	16-Dec-08	E601	0.63	1.1	<0.5	<0.5	0.65	<1	0.7	0.98	<0.5	7	<0.5
GSW-445 ^a	12-May-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	2.5	<0.5
GSW-445ª	16-Oct-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	2.9	<0.5
W-1519⁵	4-Mar-08	E601	1.5	0.59	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	18	<0.5
W-1519⁵	19-Aug-08	E601	0.56	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	7.8	<0.5
W-225 ^b	18-May-06	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	<0.5
W-225 ^b	5-Nov-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	1	<0.5	<0.5	1.4	<0.5
W-256 ^b	11-Jul-07	E601	8.8	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	1.3	<0.5
W-256 ^b	15-Sep-08	E601	9	<0.5	<0.5	<0.5	0.77	<1	1	2.2	<0.5	8.2	<0.5
W-509 ^b	12-Feb-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	6.1	<0.5
W-509 ^{b, c}	12-Feb-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	5.9	<0.5
W-509 ^b	18-Sep-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	6.5	<0.5
W-509 ^b	29-Oct-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	6.3	<0.5
W-1112 ^b	3-Apr-08	E601	0.59	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	9.2	<0.5
W-1112 ^b	2-Sep-08	E601	0.6	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<2	<0.5	10	<0.5
W-1112 ^{b, c}	2-Sep-08	E601	0.6	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	10	<1
W-1113 ^b	12-Feb-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	6.3	<0.5
 W-1113 ^b	24-Nov-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	1.2	<0.5

Notes on following page.

Addendum. VOC analyses for nearby monitor wells and extraction wells associated with treatment facilities restarted during the 4th quarter of 2008.

Notes:

 CCl_4 = Carbon tetrachloride

 $CHCl_3 = Chloroform$

1,1-DCA = 1,1-Dichloroethane

1,2-DCA = 1,2-Dichloroethane

1,1-DCE = 1,1-Dichloroethylene

1,2-DCE = 1,2-Dichloroethylene

Freon 113 = Trichlorotrifluoroethane

PCE = Tetrachloroethylene

1,1,1-TCA = 1,1,1-Trichloroethane

TCE = Trichloroethene

Freon 11 = Trichlorofluoromethane

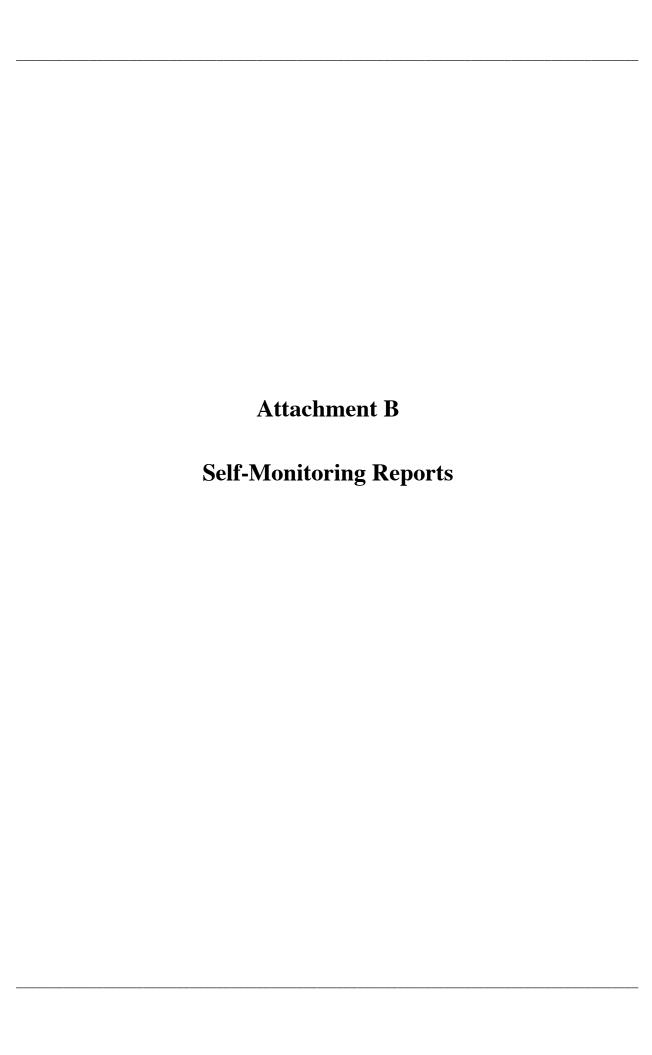
VOC = volatile organic compound

Numbers in **BOLD** print indicate positive values above the detection limit.

^a Extraction well analytical results.

^b Most recent analytical results for monitor well in nearby vicinity of treatment facility.

^c Monitor well colocated analytical results for quality control.



Self-Monitoring Report LLNL Treatment Facility A (TFA) AREA TFA

- 1. Reporting Period: Business Month October Year 2008
- 2. Dates (in **bold** and underline) treated ground water was discharged

October 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): _0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

	Monthly	Instantaneous
Source	Volume(gal)	Flow Rate(gpm)
W-408	0	0.0
	0	0.0
W-109	0	0.0
W-457	0	0.0
W-522	0	0.0
W-614	. 0	0.0
W-712	0	0.0
W-714	0	0.0
W-904	0	0.0
W-415	0	0.0
W-518	0	0.0
W-903	0	0.0
W-605	0	0.0
W-262	0	0.0
W-1004	0	0.0
W-1009	0	0.0
W-1001	0	0.0
Total:	<u>0</u>	0.0

5. Discharge Information:

Discharge Location	Receiving Water Station	Volume
Arrovo Seco	TFG-ASW	0

Self-Monitoring Report (cont'd) LLNL Treatment Facility A (TFA) **AREA TFA**

6. Comments:

This treatment facility was shut down on 8-11-08 due to a problem with the facility control system. It has not been restarted due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Date: 11-03-2008

Self-Monitoring Report LLNL Treatment Facility A (TFA) AREA TFA

1. Reporting Period: Business Month November Year 2008

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

November 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26

Total monthly time facility operated (hours): _0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

	Monthly	Instantaneous
Source	Volume(gal)	Flow Rate(gpm)
TT/ 400		0.0
W-408	0	0.0
W-109	0	0.0
W-457	0	0.0
W-522	0	0.0
W-614	0	0.0
W-712	0	0.0
W-714	0	0.0
W-904	0	0.0
W-415	0	0.0
W-518	0	0.0
W-903	0	0.0
W-605	0	0.0
W-262	0	0.0
W-1004	0	0.0
W-1009	0	0.0
W-1001	0	0.0
Total:	<u>0</u>	0.0

5. Discharge Information:

	Receiving	
Discharge Location	Water Station	Volume
West Perimeter Drainage Channel	TFB-R002	0

Self-Monitoring Report (cont'd) LLNL Treatment Facility A (TFA) AREA TFA

Arroyo Seco

TFG-ASW

_0

6. Comments:

This treatment facility was shut down on 8-11-08 due to a problem with the facility control system. It has not been restarted due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: __

Date: 12-02-200

Self-Monitoring Report LLNL Treatment Facility A (TFA) AREA TFA

- 1. Reporting Period: Business Month <u>December</u> Year <u>2008</u>
- 2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

November 27 28 29 30 December 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): _0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

	Monthly	Instantaneous
<u>Source</u>	Volume(gal)	Flow Rate(gpm)
W-408	0	0.0
W-109	0	0.0
W-457	0	0.0
W-522	0	0.0
W-614	0	0.0
W-712	0	0.0
W-714	0	0.0
W-904	0	0.0
W-415	0	0.0
W-518	0	0.0
W-903	0	0.0
W-605	0	0.0
W-262	0	0.0
W-1004	0	0.0
W-1009	0	0.0
W-1001	0	0.0
Total:	0	0.0

5. Discharge Information:

Discharge Location	Water Station	Volume
West Perimeter Drainage Channel	TFB-R002	0

Receiving

Self-Monitoring Report (cont'd) LLNL Treatment Facility A (TFA) AREA TFA

Arroyo Seco

TFG-ASW

__0

6. Comments:

This treatment facility was shut down on 8-11-08 due to a problem with the facility control system. It has not been restarted due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: ____

_ Date: 1

12-31-2008

Self-Monitoring Report LLNL Solar Treatment Unit 06 (STU06) AREA TFA-E

1. Reporting Period: Business Month October Year 2008																
2. Dates (in bold and <u>underline</u>) treated ground water was discharged																
October	01 16	02 17	03 18	04 19	05 20	06 21	07 22	08 23	09 24	10 25	11 26	12 27	13 28	14 29	15 30	31
Total monthly time facility operated (hours): _0																
3. Monthly Compliance Data:																
Date compliance sampling performed (m/d/y): Not Measured Influent pH: Effluent pH: Effluent Temperature (°C):																
4. Wellfield Data	4. Wellfield Data:															
Source		Mon <u>Volu</u>	•	gal)			aneo ate(g									
W-254				0			0.0)								
Total:	•			<u>0</u>			0.0	<u>)</u>	i.							
5. Discharge Information:																
Discharge Location							ceivii ter S	_	<u>n</u>	Z	Volu	<u>ne</u>				
Arroyo Seco							TFG-ASW				_0					
6. Comments: System we restarted duprioritized	ue to orde	a F er, pe	Y 20 endir	08 fi ng av	ındiı ailat	ng re ole st	ducti aff a	ion. l nd re	Facil esour	ities ces.	will	be re	estart	ed ir	ı a	
Operator Signature: Date: 11-03-2008																

Self-Monitoring Report LLNL Solar Treatment Unit 06 (STU06) AREA TFA-E

1. Reporting Period: Business Month November Year 2008								
2. Dates (in bold and <u>underline</u>) treated ground water was discharged								
November 01 16		05 06 07 08 20 21 22 23		12 13 14 15				
Total monthly ti	Total monthly time facility operated (hours): <u>23</u>							
3. Monthly Complian	nce Data:							
Date compliance sampling performed (m/d/y): Influent pH: Effluent pH: T.5 Effluent Temperature (°C): 20.1								
4. Wellfield Data:								
	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)						
W-254	4,223	2.9						
Total:	4,223	<u>2.9</u>						
5. Discharge Informa	5. Discharge Information:							
Discharge Loc	ation		Receiving Water Station	Volume				
Arroyo Seco	<u>)</u>	TFG-ASW	_4,223					
6. Comments: As part of facility re-activation, two new Shurflo submersible pumps were installed in W-254. In addition, the facility operated on a daily basis only and other maintenance items were addressed.								
7. I certify that the information in this report, to the best of my knowledge, is true and correct.								
Operator Signature: Date: 12-01-2008								

Self-Monitoring Report LLNL Solar Treatment Unit 06 (STU06) AREA TFA-E

1. Reporting Period: Business Month December Year 2008

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

November 27 28 29 30

December 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): _98

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 12-09-2008
Influent pH: 7.0
Effluent pH: 7.5
Effluent Temperature (°C): 15.8

4. Wellfield Data:

Source	Monthly <u>Volume(gal)</u>	Instantaneous Flow Rate(gpm)
W-254	17,977	3.2
Total:	17,977	3.2

5. Discharge Information:

Discharge Location	Water Station	Volume	
Arroyo Seco	TFG-ASW	17,977	

Receiving

6. Comments:

System down from 11-27-08 through 11-30-08 awaiting software reloading. Software reloaded and facility started on 12-1-08. System secured on 12-2-08 to load code and replace batteries. Batteries replaced and system started on 12-9-08 for self-monitoring sampling only. Secured on 12-9-08. Start system on 12-11-08. Secured system on 12-19-08 for freeze protection. Restarted system on 12-29-08.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:

Date: 12-31-2008

Self-Monitoring Report LLNL Treatment Facility B (TFB) AREA TFB

1. Reporting Period: Business Month October Year 2008

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

October 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): <u>688</u>

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>10-09-2008</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>8.0</u>
Effluent Temperature (°C):	<u> 19.7</u>

4. Wellfield Data:

	Monthly	Instantaneous
Source	Volume(gal)	Flow Rate(gpm)
TTI APR	220 F100	= 0
W-357	228,700	5.8
W-621	317,500	7.7
W-620	80,800	3.4
W-610	213,200	5.3
W-704	249,400	6.1
W-655	269,100	6.8
W-1423	326,800	8.5
	IN THE RESIDENCE OF THE PARTY O	
Total:	1,685,500	<u>43.6</u>

5. Discharge Information:

Pischarge Location

West Perimeter Drainage Channel

Receiving
Water Station
Volume

TFB-R002
1,685,500

6. Comments:

Facility down from 10-3-08 through 10-6-08 due to low air flow. W-620 down intermittently from 10-16-08 through 10-21-08 due to low water level. W-620 went down on 10-28-08 due to suspected flow meter failure.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 10-31-2008

Land Observation Report date: TFB-R002 - West Perimeter Drainage Channel

1.	Reporting Period: Business Month October Year 2	008	
2.	Date compliance sampling performed 10-09-2008		
3.	Weather Conditions:		
	Average air tempertaure (°C): 6-day total precipitation (in): Average wind speed/direction (mph):	17.4 .25 4/ S	
4.	Receiving Data:		
	Sample Location pH Temperature (C) Receiving Water N/M N/M		
5.	Land Observations, as "Yes" or "No", for reporting r	month:	
	Visual Observations	Effluent	Receiving Water
	Floating and Suspended Materials of Waste Origin Odor Discoloration and Turbidity Evidence of Beneficial Water Use	No Not Required Not Required	<u>No</u> <u>No</u> <u>No</u> <u>No</u>
6.	Odor Discoloration and Turbidity	Not Required	No No
6. 7.	Odor Discoloration and Turbidity Evidence of Beneficial Water Use	Not Required Not Required t of my knowledge, i	No No No is true and correct.

Self-Monitoring Report LLNL Treatment Facility B (TFB) AREA TFB

1. Reporting Period: Business Month November Year 2008

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

Total monthly time facility operated (hours): 631

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>11-04-2008</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>18.8</u>

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-357	213,700	5.9
W-621	281,000	7.5
W-620	0	0.0
W-610	197,700	5.2
W-704	230,700	6.1
W-655	246,100	6.7
W-1423	270,100	7.1
Total:	1,439,300	38.5

5. Discharge Information:

Pischarge Location

West Perimeter Drainage Channel

Receiving
Water Station

Volume

TFB-R002

1,439,300

6. Comments:

Began wet season hexavalent chromium on 11-24-08.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Course Date: 11-26-2008

Land Observation Report date: TFB-R002 - West Perimeter Drainage Channel

1.	Reporting Period: Business Month November Year	2008	
2.	Date compliance sampling performed 11-04-2008		
3.	Weather Conditions:		
4.	Average air tempertaure (°C): 6-day total precipitation (in): Average wind speed/direction (mph): Receiving Data:	14.6 1.21 4/ SSW	
	Sample Location pH Temperature (C) Receiving Water N/M N/M		
5.	Land Observations, as "Yes" or "No", for reporting a	month:	
	Visual Observations	Effluent	Receiving Water
	Floating and Suspended Materials of Waste Origin Odor	<u>No</u> <u>No</u> Not Required	<u>No</u> <u>No</u> <u>No</u>
	Discoloration and Turbidity Evidence of Beneficial Water Use	Not Required	No
6.	•		

Self-Monitoring Report LLNL Treatment Facility B (TFB) AREA TFB

1. Reporting Period: Business Month <u>December</u> Year <u>2008</u>

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

November <u>27</u> <u>28</u> <u>29</u> <u>30</u>

December 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15

<u>16</u> <u>17</u> <u>18</u> <u>19</u> <u>20</u> <u>21</u> <u>22</u> <u>23</u> <u>24</u> <u>25</u> <u>26</u> <u>27</u> <u>28</u> <u>29</u> <u>30</u> <u>31</u>

Total monthly time facility operated (hours): 794

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 12-02-2008
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 18.2

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-357	254,900	5.8
W-621	359,400	7.4
W-620	0	0.0
W-610	258,000	5.4
W-704	292,800	6.2
W-655	223,000	6.4
W-1423	326,200	7.0
	Electronic restate and a second secon	
Total:	<u>1,714,300</u>	<u>38.2</u>

5. Discharge Information:

Pischarge Location

West Perimeter Drainage Channel

Receiving
Water Station

Volume

TFB-R002

1,714,300

6. Comments:

Facility down due to watchdog alarm on 12-17-08. Restarted on 12-18-08. Facility down on 12-28-08 due to low air flow. Restarted on 12-29-08. W-655 down n 12-18-08 due to pipeline break. Pipeline repaired and W-655 restarted on 12-29-08.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Self-Monitoring Report (cont'd) LLNL Treatment Facility B (TFB) AREA TFB

Operator Signature:

Date: 12-31-2008

Land Observation Report date: TFB-R002 - West Perimeter Drainage Channel

1.	Reporting Period: Business Month <u>December</u> Year <u>2008</u>			
2.	Date compliance sampling performed 12-02-2008			
3.	Weather Conditions:			
	Average air tempertaure (°C): 6-day total precipitation (in): Average wind speed/direction (mph):	11 0 3/ SSE		
4.	Receiving Data:			
	Sample Location pH Temperature (C) Receiving Water N/M N/M			
5.	Land Observations, as "Yes" or "No", for reporting r	month:		
	Visual Observations	Effluent	Receiving Water	
	Floating and Suspended Materials of Waste Origin Odor Discoloration and Turbidity Evidence of Beneficial Water Use	No No Not Required Not Required	No No No No	
6.	Comments:			
7.	I certify that the information in this report, to the best Operator Signature:	t of my knowledge, i Date: 12-3		

Self-Monitoring Report LLNL Treatment Facility C (TFC) AREA TFC

1. Reporting Period: Business Month October Year 2008

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

October 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): <u>745</u>

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>10-13-2008</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>19</u>

4. Wellfield Data:

	Monthly	Instantaneous
Source Source	Volume(gal)	Flow Rate(gpm)
VV 701	502 200	12.0
W-701	592,389	13.0
W-1015	293,657	6.4
W-1116	77,765	1.7
W-1103	114,264	2.5
W-1102	141,850	3.8
W-1104	1,229,838	27.6
Total:	2,449,763	<u>55.0</u>

5. Discharge Information:

Discharge Location	Receiving Water Station	Volume
Arroyo Las Positas	_TFC-R003	2,449,763

6. Comments:

7. I certify that the is	nformation in this	report, to the	best of my	knowledge, is true and correct.
Operator Signature:) Cons	Carrege	n Ci.	Date: 10-31-2008

Land Observation Report date: TFC-R003 - Arroyo Las Positas

1.	Reporting Period: Business Month October Year 2	2008	
2.	Date compliance sampling performed 10-13-2008		
3.	Weather Conditions:		
	Average air tempertaure (°C): 6-day total precipitation (in): Average wind speed/direction (mph):	15.4 0 7/ SSW	
4.	Receiving Data:		
	Sample Location pH Temperature (C) Receiving Water N/M N/M		
5.	Land Observations, as "Yes" or "No", for reporting r	month:	
	Visual Observations	Effluent	Receiving Water
	Floating and Suspended Materials of Waste Origin Odor Discoloration and Turbidity Evidence of Beneficial Water Use	No Not Required Not Required	<u>No</u> <u>No</u> <u>No</u> <u>No</u>
6.	Odor Discoloration and Turbidity	Not Required	No No

Self-Monitoring Report LLNL Treatment Facility C (TFC) AREA TFC

1. Reporting Period: Business Month November Year 2008

2. Dates (in **bold** and underline) treated ground water was discharged

Total monthly time facility operated (hours): _544

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>11-04-2008</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	17.8

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-701	433,003	13.2
W-1015	213,524	6.5
W-1116	54,926	1.7
W-1103	91,170	2.9
W-1102	92,269	3.4
W-1104	896,954	27.4
Total:	1,781,846	55.1

5. Discharge Information:

	Receiving	
Discharge Location	Water Station	Volume
Arrovo Las Positas	TFC-R003	1.781.846

6. Comments:

Wet season hexavalent chromium treatment started on 11-25-08. System went down on 11-16-08 due to computer problem. Restarted on 11-20-08.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:

Date: 11-26-2008

Land Observation Report date: TFC-R003 - Arroyo Las Positas

1.	Reporting Period: Business Month November Year	2008	
2.	Date compliance sampling performed 11-04-2008		
3.	Weather Conditions:		
	Average air tempertaure (°C): 6-day total precipitation (in): Average wind speed/direction (mph):	14.6 1.21 4/ SSW	
4.	Receiving Data:		
	Sample Location pH Temperature (C) Receiving Water N/M N/M		
5.	Land Observations, as "Yes" or "No", for reporting r	nonth:	
	Visual Observations	<u>Effluent</u>	Receiving Water
	Visual Observations Floating and Suspended Materials of Waste Origin Odor Discoloration and Turbidity Evidence of Beneficial Water Use	Effluent No No No Not Required Not Required	Receiving Water No No No No No No
6.	Floating and Suspended Materials of Waste Origin Odor Discoloration and Turbidity	No No Not Required	<u>No</u> <u>No</u> <u>No</u>

Self-Monitoring Report LLNL Treatment Facility C (TFC) AREA TFC

1. Reporting Period: Business Month <u>December</u> Year <u>2008</u>

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

Total monthly time facility operated (hours): 838

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 12-02-2008
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 19.1

4. Wellfield Data:

	Monthly	Instantaneous
Source	Volume(gal)	Flow Rate(gpm)
W-701	647,187	13.3
W-1015	320,077	6.4
W-1116	94,346	1.8
W-1103	144,642	2.7
W-1102	165,733	3.4
W-1104	1,373,432	27.6
Total:	2,745,417	55.2

5. Discharge Information:

<u>Discharge Location</u>

Receiving

<u>Water Station</u>

Volume

Arroyo Las Positas

TFC-R003

2,745,417

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 12-31-2008

Land Observation Report date: TFC-R003 - Arroyo Las Positas

1.	Reporting Period: Business Month <u>December</u> Year	2008	
2.	Date compliance sampling performed 12-02-2008		
3.	Weather Conditions:		
	Average air tempertaure (°C): 6-day total precipitation (in): Average wind speed/direction (mph):	11 0 3/ SSE	
4.	Receiving Data:		
	Sample Location pH Temperature (C) Receiving Water N/M N/M		
5.	Land Observations, as "Yes" or "No", for reporting r	nonth:	
	<u>Visual Observations</u>	Effluent	Receiving Water
	Floating and Suspended Materials of Waste Origin Odor Discoloration and Turbidity Evidence of Beneficial Water Use	No Not Required Not Required	No No No No
6.	Comments:		
7.	I certify that the information in this report, to the bes	•	s true and correct. 1-2008

Self-Monitoring Report LLNL Mini Treatment Unit 1 (MTU1) AREA TFC-E

1. Reporting Period: Business Month October Year 2008

2. Dates (in bold and <u>underline</u>) treated ground water was discharged																
October	01 16	02 17	03 18	04 19	05 20	06 21	07 22	08 23	09 24	10 25	11 26	12 27	13 28	14 29	15 30	31
Total mont	hly ti	me fa	acilit	у ор	erate	d (ho	ours)	: _	0							
3. Monthly Cor	nplia	nce I	Data:													
Date compl Influent pH Effluent pH Effluent Te	[: [:			_	form	ned (1	m/d/	y): <u>N</u>	lot N	<u>Ieas</u>	ured					
4. Wellfield Da	ta:															
Source		Mon <u>Volu</u>	-	gal)		stanta ow R										
W-413 W-368				0			0.0									
Total:				0			0.0	<u>)</u>								
5. Discharge In:	forma	ition	:						Rec	eivii	na					
Discharge	e Loc	ation	1							ter S	_	<u>n</u>	7	Volu	<u>me</u>	
Arroyo	Las	Posi	<u>tas</u>						<u>T</u>	FC-	R003	<u>3</u>			_0	
6. Comments: This treat	ment	facil	lity v	vas s	hut c	lown	on 2	2-27-	08 d	ue to	a F	Y 20	08 fu	ındin	ıg	

reduction. Facilities will be restarted in a prioritized order, pending available staff

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Date: 11-03-2008

and resources.

Self-Monitoring Report LLNL Mini Treatment Unit 1 (MTU1) AREA TFC-E

1. Reporting Peri	od:	Busi	ness	Moı	nth	_No	vem	<u>ber</u>	Ye	ar <u>20</u>	<u>800</u>						
2. Dates (in bold	l and	d <u>un</u>	derli	<u>ne</u>)	trea	ted g	roun	ıd wa	iter v	vas d	ischa	arge	d				
	01 16	02 17	03 18	04 19	05 20	06 21	07 22	08 23	09 24	10 25	11 26	12	13	14	15		
Total monthl	y tir	ne fa	cilit	у ор	erate	d (ho	ours)	: _	0								
3. Monthly Comp	oliar	nce D)ata:														
Date complia Influent pH: Effluent pH: Effluent Tem					form	ned (1	m/d/ː	y): <u>N</u>	ot N	<u> Ieas</u>	ured						
4. Wellfield Data	:																
Source		Mon Volu		gal)			aneoi ate(g	us gpm)									
W-413 W-368				0			0.0 0.0										
Total:	-		*********	0		and the same of th	0.0)									
5. Discharge Info	rma	tion:							Das	: . : .							
Discharge 1	Loca	ation								eivii ter S	_	<u>n</u>		Volu	<u>me</u>		
Arroyo I	Las]	Posit	tas						<u>T</u>	FC-	R003	<u>3</u>			_0		
6. Comments: This treatm reduction. I and resource	Faci		-												_	aff	
7. I certify that the information in this report, to the best of my knowledge, is true and correct.																	
Operator Signature: Date: 12-02-2008																	

Self-Monitoring Report LLNL Mini Treatment Unit 1 (MTU1) AREA TFC-E

1. Reporting Period: Business Month <u>December</u> Year <u>2008</u>																
2. Dates (in bold and <u>underline</u>) treated ground water was discharged																
November December	27 01 16	28 02 17	29 03 18	30 04 19	05 20	06 21	07 22		09 24		11 26	12 27	13 28	14 29	15 30	31
Total monthly time facility operated (hours): _0																
3. Monthly Compliance Data:																
Date compliance sampling performed (m/d/y): Not Measured Influent pH: Effluent pH: Effluent Temperature (°C):																
4. Wellfield Data:																
Source		Mon <u>Volu</u>	-	gal)			aneo ate(g									
W-413 W-368				0			0.0 0.0									
Total:				0	THE SECOND SECOND SECOND	PORTO-END EXECUTION RECOGNIS	0.0	<u>)</u>	Miterial Printerior States							
5. Discharge Info	orma	ition	:						Dog		• •					
Discharge	Loc	ation	<u>l</u>							eivii ter S	_	<u>n</u>	Ž	Volu	<u>me</u>	
Arroyo	Las	Posi	<u>tas</u>						<u>T</u>	FC-	R003	3			_0	
6. Comments: This treatment facility was shut down on 2-27-08 due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.																
7. I certify that the information in this report, to the best of my knowledge, is true and correct.																
Operator Signature: Date: 12-31-2008																

Self-Monitoring Report LLNL Portable Treatment Unit 1 (PTU1) AREA TFC-SE

1. Reporting Period: Business Month October Year 2008

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

October	01 16	02 17	03 18	04 19	05 20	06 21	07 22	08 23	09 24	10 25	11 26	12 27	13 28	14 29	15 30	31	
Total month	ıly ti	me fa	acilit	у ор	erate	d (h	ours)): <u> </u>	0								
3. Monthly Con	nplia	nce I	Data:														
Date compling Influent pH Effluent pH Effluent Terminal Effluent Terminal Date of the Internal Date of the Interna	:		•		form	ned (m/d/	y): <u>N</u>	Not N	<u>Ieas</u> i	ured	:					
4. Wellfield Dat	a:																
Source		Mon <u>Volu</u>		gal)			aneo (ate()	us gpm)									
W-1213 W-2201				0			0.0										
Total:				0			0.0	<u>0</u>									
5. Discharge Inf	orma	ation	:						D								
Discharge	Loc	ation	<u>1</u>							ceivii ter S	_	<u>n</u>	Z	Volu1	<u>ne</u>		
Arroyo	Las	Posi	<u>tas</u>						<u>T</u>	FC-	R003	3		-	_0		
5. Comments: This treatments reduction. and resour	Faci													_		aff	
7. I certify that t			namon lou	n in 1	this/r	epor		the b	est e	of my				s true 2008		l corr	ect

Self-Monitoring Report LLNL Portable Treatment Unit 1 (PTU1) AREA TFC-SE

1. Reporting Period: Business Month November Year 2008

2. Dates (in bold	l and	d <u>un</u>	derli	ine)	trea	ted g	grour	nd wa	ater v	vas d	isch	arge	d			
November		02 17	03 18	04 19	05 20	06 21	07 22		09 24	10 25	11 26	12	13	14	15	
Total monthl	y tiı	ne fa	acilit	у ор	erate	d (h	ours)):	0							
3. Monthly Comp	pliar	ісе Г	Data:													
Date complia Influent pH: Effluent pH: Effluent Tem					form	ned (m/d/	y): <u>N</u>	lot N	Ieası	ured					
4. Wellfield Data	ı:															
Source		Mon <u>Volu</u>		gal)			aneo (ate(us gpm)								
W-1213 W-2201	•			0			0.0									
Total:	•		december of the second	0			0.0	<u>)</u>	***************************************							
5. Discharge Info	rma	ition:	:													
Discharge 1	Loc	ation	<u>l</u>							eivii ter S	_	<u>n</u>	Ž	/olu1	<u>ne</u>	
Arroyo I	Las	Posi	<u>tas</u>						<u>T</u>	FC-	R003	<u>3</u>			_0	
6. Comments: This treatm reduction. I and resource	Faci													_		aff
7. I certify that th	e in	form	ation	n) in t	his r	por	5 , to	the b	est o	f my	kno	wled	lge, i	s tru	e and	correct.
Operator Signatus	re: _			oll		Car	vas)	<u></u>		Dat	e: <u>12</u>	<u>-01-</u>	2008		

Self-Monitoring Report LLNL Portable Treatment Unit 1 (PTU1) AREA TFC-SE

1.	Reporting	Period:	Business	Month	December	Year 2008

2. Dates (in **bold** and underline) treated ground water was discharged

November 27 28 29 30 December 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

Source	Monthly <u>Volume(gal)</u>	Instantaneous Flow Rate(gpm)
W-1213 W-2201	0 0	0.0 0.0
Total:	<u>0</u>	0.0

5. Discharge Information:

Discharge Location	Receiving Water Station Vo	
_Arroyo Las Positas	TFC-R003	0

6. Comments:

This treatment facility was shut down on 5-9-08 due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:

Date: 12-31-2008

Self-Monitoring Report LLNL Treatment Facility D (TFD) AREA TFD

1. Reporting Period: Business Month October Year 2008

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

October 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): _0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-653	0	0.0
W-351	0	0.0
W-907-2	0	0.0
W-906	0	0.0
W-1206	0	0.0
W-1208	0	0.0
W-2102	0	0.0
W-2011	0	0.0
W-2101	0	0.0
Total:	0	0.0

5. Discharge Information:

Discharge Location	Receiving Water Station	Volume	
Arroyo Las Positas	TFC-R003	_0	

6. Comments:

This treatment facility was shut down on 7-25-08 due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Self-Monitoring Report (cont'd) LLNL Treatment Facility D (TFD) AREA TFD

Operator Signature: ___

Date: 11-03-2008

Self-Monitoring Report LLNL Treatment Facility D (TFD) AREA TFD

- 1. Reporting Period: Business Month November Year 2008
- 2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

November 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26

Total monthly time facility operated (hours): _0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

	Monthly	Instantaneous
Source	Volume(gal)	Flow Rate(gpm)
W-653	0	0.0
W-351	0	0.0
W-907-2	0	0.0
W-906	0	0.0
W-1206	0	0.0
W-1208	0	0.0
W-2102	0	0.0
W-2011	0	0.0
W-2101	0	0.0
Total:	<u>0</u>	0.0

5. Discharge Information:

Discharge Location	Receiving Water Station	Volume	
Arroyo Las Positas	TFC-R003	_0	

6. Comments:

This treatment facility was shut down on 7-25-08 due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Self-Monitoring Report (cont'd) LLNL Treatment Facility D (TFD) AREA TFD

Operator Signature: ___

Date: 12-02-2008

Self-Monitoring Report LLNL Treatment Facility D (TFD) AREA TFD

1. Reporting Period: Business Month <u>December</u> Year <u>2008</u>

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

November 27 28 29 30 December 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

	Monthly	Instantaneous
Source	Volume(gal)	Flow Rate(gpm)
W-653	0	0.0
W-351	0	0.0
W-907-2	0	0.0
W-906	0	0.0
W-1206	0	0.0
W-1208	0	0.0
W-2102	0	0.0
W-2011	0	0.0
W-2101	0	0.0
Total:	0	0.0

5. Discharge Information:

	Receiving	
Discharge Location	Water Station	Volume
Arroyo Las Positas	TFC-R003	0

6. Comments:

This treatment facility was shut down on 7-25-08 due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Self-Monitoring Report (cont'd) LLNL Treatment Facility D (TFD) AREA TFD

Operator Signature: _

Date: 12-31-2008

Self-Monitoring Report LLNL Portable Treatment Unit 8 (PTU8) AREA TFD-E

1. Reporting Period: Business Month October Year 2008

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

October 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): <u>755</u>

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>10-14-2008</u>
Influent pH:	<u>7.5</u>
Effluent pH:	7.5
Effluent Temperature (°C):	17.7

4. Wellfield Data:

	Monthly	Instantaneous
Source	Volume(gal)	Flow Rate(gpm)
W-1255	0	0.0
W-1253	0	0.0
W-1307	277,000	6.3
W-1303	43,400	0.9
W-1306	12,100	0.3
W-1404	300	0.0
W-1550	112,800	2.6
W-1301	61,700	1.2
W-2006	1,900	0.0
W-2203	53,800	1.1
Total:	563,000	12.4

5. Discharge Information:

Discharge Location	Water Station	Volume
Arroyo Las Positas	TFC-R003	563,000

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:

Date: 10-31-2008

Self-Monitoring Report LLNL Portable Treatment Unit 8 (PTU8) AREA TFD-E

1. Reporting Period: Business Month November Year 2008

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

Total monthly time facility operated (hours): 630

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>11-05-2008</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	18.9

4. Wellfield Data:

	Monthly	Instantaneous
Source	Volume(gal)	Flow Rate(gpm)
W-1255	0	0.0
W-1253	0	0.0
W-1307	237,100	6.3
W-1303	35,900	0.9
W-1306	9,600	0.3
W-1404	0	0.0
W-1550	94,400	2.6
W-1301	52,400	1.3
W-2006	1,300	0.0
W-2203	47,100	1.4
Total:	477,800	12.8

5. Discharge Information:

Discharge Location	Water Station V		
Arroyo Las Positas	TFC-R003	477,800	

6. Comments:

7. I certify that the in	formation in the	is/report, to th	e best of my	knowledge, is true	and correct.
Operator Signature:	Stoll	Cawage	, (, · · ·	Date: 11-26-2008	
1 0					

Self-Monitoring Report LLNL Portable Treatment Unit 8 (PTU8) AREA TFD-E

1. Reporting Period: Business Month <u>December</u> Year 2008

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

November <u>27</u> <u>28</u> <u>29</u> <u>30</u>

December $\frac{\overline{01}}{16} \frac{\overline{02}}{17} \frac{\overline{03}}{18} \frac{\overline{04}}{19} \frac{\overline{05}}{20} \frac{\overline{06}}{21} \frac{\overline{07}}{22} \frac{\overline{08}}{23} \frac{\overline{09}}{24} \frac{\overline{10}}{25} \frac{\overline{11}}{\overline{26}} \frac{\overline{12}}{27} \frac{\overline{13}}{28} \frac{\overline{14}}{\overline{29}} \frac{\overline{15}}{\overline{30}} \frac{\overline{11}}{\overline{31}}$

Total monthly time facility operated (hours): <u>853</u>

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>12-03-2008</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>17.5</u>

4. Wellfield Data:

	Monthly	Instantaneous
Source	Volume(gal)	Flow Rate(gpm)
W-1255	0	0.0
W-1253	0	0.0
W-1307	321,100	6.4
W-1303	45,900	1.1
W-1306	12,400	0.3
W-1404	0	0.0
W-1550	91,600	2.4
W-1301	70,100	1.3
W-2006	1,200	0.0
W-2203	51,700	1.0
	-	
Total:	<u>594,000</u>	<u>12.5</u>

5. Discharge Information:

	Receiving	
Discharge Location	Water Station	Volume
_Arroyo Las Positas	TFC-R003	594,000

6. Comments:

^{7.} I certify that the information in this report, to the best of my knowledge, is true and correct.

Self-Monitoring Report (cont'd) LLNL Portable Treatment Unit 8 (PTU8) AREA TFD-E

Operator Signature:

Date: 12-31-2008

Self-Monitoring Report LLNL Portable Treatment Unit 10 (PTU10) AREA TFD-HPD

1. Reporting Period: Business Month October Year 2008

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

October 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): _0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

	Monthly	Instantaneous
Source	Volume(gal)	Flow Rate(gpm)
W-1254	0	0.0
W-1653	0	0.0
W-1657	0	0.0
W-1551	0	0.0
W-1654	0	0.0
W-1656	0	0.0
W-1650	0	0.0
W-1652	0	0.0
W-1552	0	0.0
W-1651	0	0.0
W-1655	0	0.0
Total:	0	0.0

5. Discharge Information:

	Receiving	
Discharge Location	Water Station	Volume
Arroyo Las Positas	TFC-R003	_0

6. Comments:

This treatment facility was shut down on 10-11-07 for a bioremediation pilot test at this location. It has not been restarted due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

Self-Monitoring Report (cont'd) LLNL Portable Treatment Unit 10 (PTU10) AREA TFD-HPD

7. I certify that the information in thi	is peport, to t	the best of my	knowledge, is true and correct
	Cavas		Date: 11-03-2008
1 8	1		

Self-Monitoring Report LLNL Portable Treatment Unit 10 (PTU10) AREA TFD-HPD

1. Reporting Period: Business Month November Year 2008

2. Dates (in **bold** and underline) treated ground water was discharged

November 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26

Total monthly time facility operated (hours): _0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

	Monthly	Instantaneous
Source	Volume(gal)	Flow Rate(gpm)
W-1254	0	0.0
W-1653	0	0.0
W-1657	0	0.0
W-1551	0	0.0
W-1654	0	0.0
W-1656	0	0.0
W-1650	0	0.0
W-1652	0	0.0
W-1552	0	0.0
W-1651	0	0.0
W-1655	0	0.0
Total:	<u>0</u>	0.0

5. Discharge Information:

Discharge Location	Receiving Water Station	Volume
_Arroyo Las Positas	_TFC-R003	_0

6. Comments:

This treatment facility was shut down on 10-11-07 for a bioremediation pilot test at this location. It has not been restarted due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

Self-Monitoring Report (cont'd) LLNL Portable Treatment Unit 10 (PTU10) AREA TFD-HPD

7. I certify that the in	formation in thi	s _i report, to	the best-of my	knowledge, is true	and correct
Operator Signature: _	N			Date: <u>12-01-2008</u>	

Self-Monitoring Report LLNL Portable Treatment Unit 10 (PTU10) AREA TFD-HPD

1. Reporting Period: Business Month <u>December</u> Year 2008

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

November 27 28 29 30 December 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): _0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

Source	Monthly <u>Volume(gal)</u>	Instantaneous Flow Rate(gpm)
W-1254	0	0.0
W-1653	0	0.0
W-1657	0	0.0
W-1551	0	0.0
W-1654	0	0.0
W-1656	0	0.0
W-1650	0	0.0
W-1652	0	0.0
W-1552	0	0.0
W-1651	0	0.0
W-1655	0	0.0
Total:	0	0.0

5. Discharge Information:

Discharge Location	Water Station	<u>Volume</u>
Arroyo Las Positas	TFC-R003	_0

Receiving

6. Comments:

This treatment facility was shut down on 10-11-07 for a bioremediation pilot test at this location. It has not been restarted due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and

Self-Monitoring Report (cont'd) LLNL Portable Treatment Unit 10 (PTU10) AREA TFD-HPD

resources.				
7. I certify that the in	formation in this re	eport, to the best of	f my knowledge,	is true and correct
Operator Signature: _	Stril	Cawagus	Date: <u>12-31</u> .	2008

Self-Monitoring Report LLNL Portable Treatment Unit 2 (PTU2) AREA TFD-S

1. Reporting Period: Business Month October Year 2008

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

October 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): _0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

	Monthly	Instantaneous
Source	Volume(gal)	Flow Rate(gpm)
W-1503	0	0.0
W-1510	0	0.0
W-1504	0	0.0
Total:	0	0.0

5. Discharge Information:

Discharge Location	Water Station	Volume
Arroyo Las Positas	_TFC-R003	_0

6. Comments:

System secured on 5/7/08 due to malfunctioning water level transducers in wells W-1503 and W-1510. PTU2 has not been repaired and restarted due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 11-06-2008

Self-Monitoring Report LLNL Portable Treatment Unit 2 (PTU2) AREA TFD-S

- 1. Reporting Period: Business Month November Year 2008
- 2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

November 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26

Total monthly time facility operated (hours): _1

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>11-21-2008</u>
Influent pH:	<u>7.0</u>
Effluent pH:	7.5
Effluent Temperature (°C):	<u> 20.6</u>

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-1503 W-1510	1,424 247	17.3 3.0
W-1510 W-1504	250 250	3.1
Total:	1,921	23.4

5. Discharge Information:

Discharge Location	Receiving Water Station	Volume
<u> </u>	Water Station	Voicinic
Arroyo Las Positas	_TFC-R003	1,921

6. Comments:

System secured on 5/7/08 due to malfunctioning water level transducers in wells W-1503 and W-1510. PTU2 has not been repaired and restarted due to a FY 2008 funding reduction. System operated on 11/21/08 to collect monthly samples and readings. Facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 12-04-2008

Self-Monitoring Report LLNL Portable Treatment Unit 2 (PTU2) AREA TFD-S

- 1. Reporting Period: Business Month <u>December</u> Year 2008
- 2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

November 27 28 29 30

December 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 **22** 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 1

3. Monthly Compliance Data:

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-1503	1,720	17.1
W-1510	298	2.9
W-1504	283	2.9
Total:	2,301	<u>22.9</u>

5. Discharge Information:

Discharge Location Receiving Water Station

Arroyo Las Positas TFC-R003 2,301

Volume

6. Comments:

System secured on 5/7/08 due to malfunctioning water level transducers in wells W-1503 and W-1510. PTU2 has not been repaired and restarted due to a FY 2008 funding reduction. System operated on 12/22/08 to collect monthly samples and readings. Facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 01-06-2009

Self-Monitoring Report LLNL Portable Treatment Unit 11 (PTU11) AREA TFD-SE

1. Reporting Period: Business Month October Year 2008

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

October 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): <u>753</u>

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>10-15-2008</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>8.0</u>
Effluent Temperature (°C):	<u>18.5</u>

4. Wellfield Data:

	Monthly	Instantaneous
Source	Volume(gal)	Flow Rate(gpm)
W-314	0	0.0
W-1403	0	0.0
W-1308	173,343	3.9
W-1904	0	0.0
W-2005	58,452	1.2
SIP-ETC-201	0	0.0
	P	
Total:	231,795	<u>5.1</u>

5. Discharge Information:

Discharge Location	Receiving Water Station	Volume
Arroyo Las Positas	TFC-R003	231,795

6. Comments:

7. I certify that the in	formation in this	s/report, to	the best of my	knowledge, is true and correct
Operator Signature: _	Stoit	Caran	u.C.	Date: 10-31-2008
- F		1		

Self-Monitoring Report LLNL Portable Treatment Unit 11 (PTU11) AREA TFD-SE

1. Reporting Period: Business Month November Year 2008

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

Total monthly time facility operated (hours): 629

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	11-05-2008
Influent pH:	7.0
Effluent pH:	7.5
Effluent Temperature (°C):	17.9

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-314	0	0.0
W-1403	0	0.0
W-1308	141,383	3.8
W-1904	0	0.0
W-2005	49,854	1.3
SIP-ETC-201	. 0	0.0
Total:	191,237	<u>5.1</u>

5. Discharge Information:

Discharge Location	Water Station	Volume
Arroyo Las Positas	_TFC-R003	191,237

Pacaiving

6. Comments:

7. I certify that the information in this repor	ort, to the best of my	knowledge, is true and correct
Operator Signature:	mus Cs.	Date: <u>11-26-2008</u>

Self-Monitoring Report LLNL Portable Treatment Unit 11 (PTU11) AREA TFD-SE

1. Reporting Period: Business Month <u>December</u> Year <u>2008</u>

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

Total monthly time facility operated (hours): <u>851</u>

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>12-03-2008</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>17.2</u>

4. Wellfield Data:

	Monthly	Instantaneous
Source Source	Volume(gal)	Flow Rate(gpm)
TT 0.1.4		
W-314	0	0.0
W-1403	0	0.0
W-1308	186,492	3.7
W-1904	0	0.0
W-2005	68,163	1.2
SIP-ETC-201	0	0.0
Total:	254,655	<u>4.9</u>

5. Discharge Information:

	Receiving	
Discharge Location	Water Station	Volume
Arroyo Las Positas	TFC-R003	254,655

6. Comments:

7. I certify that the information in this report, to the best-of my knowledge, is true and correct.

Operator Signature:

Date: 12-31-2008

Self-Monitoring Report LLNL Portable Treatment Unit 12 (PTU12) AREA TFD-SS

1. Reporting Period: Business Month October Year 2008

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

October 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): <u>745</u>

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>10-07-2008</u>
Influent pH:	7.5
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>21</u>

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-1523 W-1603	361,911 4	8.1 0.0
W-1602	214,556	4.8
W-1601	49,327	1.1
Total:	625,798	14.0

5. Discharge Information:

D: 1	Receiving	V T 1
Discharge Location	Water Station	Volume
Arroyo Las Positas	TFC-R003	625,798

6. Comments:

7. I certify that the in	nformation in	this report, to the	e best of my	knowledge, is true	and correct
Operator Signature:	1/11/1		·		
Operator Signature:	<i> Ш</i>	UNC.		Date: <u>11-06-2008</u>	

Self-Monitoring Report LLNL Portable Treatment Unit 12 (PTU12) AREA TFD-SS

1. Reporting Period: Business Month November Year 2008

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

Total monthly time facility operated (hours): 632

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>11-18-2008</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	21.4

4. Wellfield Data:

	Monthly	Instantaneous
Source	Volume(gal)	Flow Rate(gpm)
W-1523	302,696	8.0
W-1603	0	0.0
W-1602	180,714	4.8
W-1601	42,127	1.1
Total:	<u>525,537</u>	<u>13.9</u>

5. Discharge Information:

Discharge Location	Water Station	Volume
Arroyo Las Positas	TFC-R003	525,537

Receiving

6. Comments:

7. I certify that the information in this report, to the best of my	knowledge, is true and correct
Operator Signature	Date: 12-04-2008

Self-Monitoring Report LLNL Portable Treatment Unit 12 (PTU12) AREA TFD-SS

1. Reporting Period: Business Month <u>December</u> Year <u>2008</u>

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

November <u>27</u> <u>28</u> <u>29</u> <u>30</u>

Total monthly time facility operated (hours): <u>848</u>

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>12-18-2008</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>19.5</u>

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-1523 W-1603 W-1602 W-1601	399,880 0 242,899 60,405	7.9 0.0 4.8 1.2
Total:	703,184	13.9

5. Discharge Information:

Discharge Location	Receiving Water Station	Volume
Arroyo Las Positas	_TFC-R003	703,184

6. Comments:

W-1603 secure pending well pump repairs.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: ///// Date: 01-06-2009

Self-Monitoring Report LLNL Portable Treatment Unit 6 (PTU6) AREA TFD-W

1. Reporting Period: Business Month October Year 2008

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

October 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 725

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>10-08-2008</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>21.1</u>

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-1216 W-1215 W-1902	202,774 1 705,300	4.7 0.0 16.6
Total:	908,075	21.3

5. Discharge Information:

Arroyo Las Positas	TFC-R003	908,075
Discharge Location	Water Station	Volume
	Receiving	

6. Comments:

W-1215 pump failed on 8-8-08, repairs pending. System secured on 10/30/08 for wildlife mitigation.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: _______ Date: <u>11-06-2008</u>

Self-Monitoring Report LLNL Portable Treatment Unit 6 (PTU6) AREA TFD-W

1. Reporting Period: Business Month November Year 2008 2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged November 01 02 03 <u>04 05 06 07 08 09 10 11 12 13 14 15</u> <u>16</u> <u>17</u> <u>18</u> <u>19</u> <u>20</u> <u>21</u> <u>22</u> <u>23</u> <u>24</u> <u>25</u> <u>26</u> Total monthly time facility operated (hours): 480 3. Monthly Compliance Data: Date compliance sampling performed (m/d/y): 11-01-2008 Influent pH: Effluent pH: Effluent Temperature (°C): 4. Wellfield Data: Monthly Instantaneous Source Volume(gal) Flow Rate(gpm) W-1216 114,240 4.0 W-1215 0.0 W-1902 449,784 15.6 Total: 564,025 **19.6** 5. Discharge Information: Receiving Discharge Location Water Station Volume Arroyo Las Positas TFC-R003 564,025 6. Comments: System secure from 10/30/08 to 11/4/08 for wildlife mitigation. System shut down from 11/22/08 to 11/24/08 due to facility power failure. 7. I certify that the information in this report, to the best of my knowledge, is true and correct. Date: 12-04-2008 Operator Signature:

Self-Monitoring Report LLNL Portable Treatment Unit 6 (PTU6) AREA TFD-W

1. Reporting Period: Business Month <u>December</u> Year <u>2008</u>

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

November <u>27</u> <u>28</u> <u>29</u> <u>30</u>

Total monthly time facility operated (hours): <u>849</u>

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>12-16-2008</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>19.9</u>

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-1216 W-1215 W-1902	197,132 0 712,994	3.8 0.0 13.9
Total:	910,126	<u>17.7</u>

5. Discharge Information:

Discharge Location	Water Station	Volume
Arroyo Las Positas	TFC-R003	910,126

6. Comments:

W-1215 secure pending well pump repairs.

7. I certify that the information in this peport, to the best of my knowledge, is true and correct.

Operator Signature: Date: 01-06-2009

Self-Monitoring Report LLNL Vapor Extraction System 11 (VES11) AREA VTFD-ETCS

1. Reporting Period: Business Month October Year 2008

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

October 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

3. Wellfield Data:

	Monthly	Instantaneous		F	Hours
Source	Volume(cu. f	t) Flow Rate(scfm)	P(in. Hg)	<u>T(°F)</u> o	of Op.
W-1904	0	0.0	0	0	0
W-ETC-2004	\mathbf{B} 0	0.0	0	0	0
W-ETC-2004	·A 0	0.0	0	0	0
W-ETC-2003	0	0.0	0	0	0
SIP-ETC-201	. 0	0.0	0	0	0
Total:	<u>0</u>	0.0			

4. Comments:

This treatment facility was shut down on 8/12/07. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: _______ Date: <u>11-06-2008</u>

Self-Monitoring Report LLNL Vapor Extraction System 11 (VES11) AREA VTFD-ETCS

1. Reporting Period: Business Month November Year 2008

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

November 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26

3. Wellfield Data:

	Monthly	Instanta	aneous		H	lours
Source	Volume(cu.	ft) Flow R	ate(scfm)	P(in. Hg)	<u>Γ(°F)</u> ο	f Op.
W-1904	()	0.0	0	0	0
W-ETC-200	4B ()	0.0	0	0	0
W-ETC-200)4A ()	0.0	0	0	0
W-ETC-200	03)	0.0	0	0	0
SIP-ETC-20)1 ()	0.0	0	0	0
Total:	0	<u>)</u>	0.0			

4. Comments:

This treatment facility was shut down on 8/12/07. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: _______ Date: <u>12-04-2008</u>

Self-Monitoring Report LLNL Vapor Extraction System 11 (VES11) AREA VTFD-ETCS

- 1. Reporting Period: Business Month <u>December</u> Year <u>2008</u>
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

November 27 28 29 30

December 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15

16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

3. Wellfield Data:

	Monthly	Instantaneous		H	Hours
Source	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	<u>T(°F)</u> c	of Op.
W-1904	0	0.0	0	0	0
W-ETC-2004	4B 0	0.0	0	0	0
W-ETC-2004	4A 0	0.0	0	0	0
W-ETC-2003	3 0	0.0	0	0	0
SIP-ETC-20	1 0	0.0	0	0	0
Total:	0	0.0			

4. Comments:

This treatment facility was shut down on 8/12/07. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the in	nformation in this re	port, to the best	of my knowledge	e, is true and c	orrect
Operator Signature:	Mark I lec		D-4 01 (
Operator Signature:	Maril 1000 -		Date: <u>01-0</u>	<u> 10-2009</u>	

Self-Monitoring Report LLNL Vapor Extraction System 07 (VES07) AREA VTFD-HPD

- 1. Reporting Period: Business Month October Year 2008
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

October 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

3. Wellfield Data:

	Monthly	Instantaneous			Hours
Source	Volume(cu. ft)	Flow Rate(scfm	P(in. Hg)	$\underline{T(^{o}F)}$	of Op.
W-1651	0	0.0	. 0	0	0
	•		ū	Ū	•
W-1653	0	0.0	0	0	0
W-1657	0	0.0	0	0	0
W-1654	0	0.0	0	0	0
W-1652	0	0.0	0	0	0
W-1552	0	0.0	0	0	0
W-1655	0	0.0	0	0	0
W-1656	0	0.0	0	0	0
W-1650	0	0.0	0	0	0
W-HPA-002	A 0	0.0	0	0	0
W-HPA-002	B 0	0.0	0	0	0
Total:	<u>0</u>	0.0	THE STATE OF THE S		

4. Comments:

This treatment facility was shut down on 10-11-07 for a bioremediation test at this location. It has not been restarted due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in thi	report, to	the best of my	knowledge, is true and	correct.
Operator Signature:	Cerragi	u Ci	Date: <u>11-03-2008</u>	

Self-Monitoring Report LLNL Vapor Extraction System 07 (VES07) AREA VTFD-HPD

- 1. Reporting Period: Business Month November Year 2008
- 2. Dates (in **bold** and underline) treatment facility operated

November 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26

3. Wellfield Data:

	Monthly In	nstantaneous		I	Hours
Source	Volume(cu. ft) F	low Rate(scfm)	P(in. Hg)	<u>T(°F)</u> (of Op.
W-1651	0	0.0	0	0	0
W-1653	0	0.0	0	0	0
W-1657	0	0.0	0	0	0
W-1654	0	0.0	. 0	0	0
W-1652	0	0.0	0	0	0
W-1552	0	0.0	0	0	0
W-1655	0	0.0	0	0	0
W-1656	0	0.0	0	0	0
W-1650	0	0.0	0	0	0
W-HPA-002	A 0	0.0	0	0	0
W-HPA-002	B 0	0.0	0	0	0
Total:	0	0.0			·

4. Comments:

This treatment facility was shut down on 10-11-07 for a bioremediation test at this location. It has not been restarted due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in the	his report,	to the best	of my	knowledge, is	true and correct
Operator Signature:	Caway	no.C.		Date: 12-01-2	
	()				

Self-Monitoring Report LLNL Vapor Extraction System 07 (VES07) AREA VTFD-HPD

1. Reporting Period: Business Month <u>December</u> Year <u>2008</u>

2. Dates (in **bold** and underline) treatment facility operated

November 27 28 29 30 December 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

3. Wellfield Data:

_	Monthly	Instantaneous			Iours
Source	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	<u>Γ(°F)</u> ο	<u>f Op.</u>
W-1651	0	0.0	0	0	0
W-1653	0	0.0	0	0	0
W-1657	0	0.0	0	0	0
W-1654	0	0.0	0	0	0
W-1652	0	0.0	0	0	0
W-1552	0	0.0	0	0	0
W-1655	0	0.0	0	0	0
W-1656	0	0.0	0	0	0
W-1650	0	0.0	0	0	0
W-HPA-002	A 0	0.0	0	0	0
W-HPA-002I	3 0	0.0	0	0	0
Total:	0	0.0			NOTE OF THE PARTY

4. Comments:

This treatment facility was shut down on 10-11-07 for a bioremediation test at this location. It has not been restarted due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in		/ knowledge, is true and correct.
Operator Signature:	Kawaza C.	Date: <u>12-31-2008</u>

Self-Monitoring Report LLNL Vapor Extraction System 13 (VES13) AREA VTFD-HS

1. Reporting Period: Business Month October Year 2008

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

October 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

3. Wellfield Data:

Source	,	Instantaneous Flow Rate(scfm)	P(in. Hg)		lours f Op.	
W-653	0	0.0	0	0	0	
W-2102	0	0.0	0	0	0	
W-2011	0	0.0	0	0	0	
W-2101	0	0.0	0	0	0	
						-
Total:	<u>0</u>	$\underline{0.0}$				

4. Comments:

This treatment facility was shut down on 6-7-07 due to a failed blower motor. It has not been restarted due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:

Date: 11-03-2008

Self-Monitoring Report LLNL Vapor Extraction System 13 (VES13) AREA VTFD-HS

- 1. Reporting Period: Business Month November Year 2008
- 2. Dates (in **bold** and underline) treatment facility operated

November 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26

3. Wellfield Data:

Source	Monthly Volume(cu. ft	Instantaneous <u>Flow Rate(scfm)</u>	P(in. Hg)		lours f Op.	
W-653	0	0.0	0	0	0	
W-2102	0	0.0	0	0	0	
W-2011	0	0.0	0	0	0	
W-2101	0	0.0	0	0	0	
Total:	<u>0</u>	0.0				annes.

4. Comments:

This treatment facility was shut down on 6-7-07 due to a failed blower motor. It has not been restarted due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:

Date: 12-01-2008

Self-Monitoring Report LLNL Vapor Extraction System 13 (VES13) AREA VTFD-HS

- 1. Reporting Period: Business Month <u>December</u> Year <u>2008</u>
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

November 27 28 29 30 December 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

3. Wellfield Data:

Source	Monthly In Volume(cu. ft) Fl	stantaneous ow Rate(scfm)	P(in. Hg)		lours f Op.
W-653	0	0.0	0	0	0
W-2102	0	0.0	0	0	0
W-2011	0	0.0	0	0	0
W-2101	0	0.0	0	0	0
Total:	<u></u>	0.0			

4. Comments:

This treatment facility was shut down on 6-7-07 due to a failed blower motor. It has not been restarted due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in thi		ny knowledge, is true and correct.
Operator Signature:	Cavagua.	Date: 12-31-2008

Self-Monitoring Report LLNL Portable Treatment Unit 3 (PTU3) AREA TFE-E

1. Reporting Period: Business Month October Year 2008

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

October 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): _0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

	Monthly	Instantaneous
Source	Volume(gal)	Flow Rate(gpm)
W-566	0	0.0
W-1109	0	0.0
W-1903	0	0.0
W-1909	0	0.0
W-2305	0	0.0
Total:	0	0.0

5. Discharge Information:

Discharge Location	Water Station Vol		
Arroyo Las Positas	_TFC-R003	_0	

Dagairing

6. Comments:

System shut down and was secured on 6/2/08 due to electronic (PLC) failure. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 11-06-2008

Self-Monitoring Report LLNL Portable Treatment Unit 3 (PTU3) AREA TFE-E

1. Reporting Period: Business Month November Year 2008

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

November 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26

Total monthly time facility operated (hours): _0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

	Monthly	Instantaneous
Source	Volume(gal)	Flow Rate(gpm)
W-566	0	0.0
W-1109	0	0.0
W-1903	0	0.0
W-1909	0	0.0
W-2305	0	0.0
Total:	<u>0</u>	0.0

5. Discharge Information:

	Receiving	
Discharge Location	Water Station	Volume
Arroyo Las Positas	TFC-R003	_0

6. Comments:

System shut down and was secured on 6/2/08 due to electronic (PLC) failure. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the in	nformation in	this report, to	the best of my	knowledge, is true	and correct.
Operator Signature:	March	1///	•		
Operator Signature:	f flux	WC		Date: <u>12-04-2008</u>	

Self-Monitoring Report LLNL Portable Treatment Unit 3 (PTU3) AREA TFE-E

1. Reporting Period: Business Month <u>December</u> Year <u>2008</u>

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

November 27 28 29 30

December 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15

16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): _0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

	Monthly	Instantaneous
Source	Volume(gal)	Flow Rate(gpm)
W-566	0	0.0
W-1109	0	0.0
W-1903	0	0.0
W-1909	0	0.0
W-2305	0	0.0
Total:	0	0.0

5. Discharge Information:

Discharge Location	Receiving Water Station	Volume
Arroyo Las Positas	TFC-R003	_0

6. Comments:

System shut down and was secured on 6/2/08 due to electronic (PLC) failure. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 01-06-2009

Self-Monitoring Report LLNL GAC Treatment Unit 07 (GTU07) AREA TFE-HS

1. Reporting Period: Business Month October Year 2008 2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 October 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 Total monthly time facility operated (hours): 0 3. Monthly Compliance Data: Date compliance sampling performed (m/d/y): Not Measured Influent pH: Effluent pH: Effluent Temperature (°C): 4. Wellfield Data: Monthly Instantaneous Source Volume(gal) Flow Rate(gpm) W-2105 0 0.0 W-2012 0 0.0 Total: 0 0.0 5. Discharge Information: Receiving Discharge Location Water Station Volume **Arroyo Las Positas** TFC-R003 0 6. Comments: System secured 6/10/08 due to concerns regarding W-2012 pump cycling on and off. It has not been restarted due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources. 7. I certify that the information in this report, to the best of my knowledge, is true and correct. Date: <u>11-06-2008</u> Operator Signature:

Self-Monitoring Report LLNL GAC Treatment Unit 07 (GTU07) AREA TFE-HS

1. Reporting Per	iod:	Busi	ness	Mo	nth	_No	vem	ber	Ye	ar <u>2(</u>	008				
2. Dates (in bol	d and	d <u>un</u>	derli	ne)	trea	ted g	groun	ıd wa	ater v	vas c	lisch	argeo	i		
November	01 16	02 17		04 19	05 20	06 21	07 22	08 23	09 24		11 26	12	13	14	15
Total month	ly tiı	me fa	acilit	у ор	erate	d (ho	ours)	•	0						
3. Monthly Compliance Data:															
Date compli Influent pH: Effluent pH: Effluent Ter	•			-	form	ied (1	m/d/ː	y): <u>N</u>	lot N	<u>Ieas</u>	ured				
4. Wellfield Date	a:														
Source	Monthly Instantaneous Source Volume(gal) Flow Rate(gpm)														
W-2105 W-2012				0			0.0 0.0								
Total:	-			0			0.0	<u>)</u>							
5. Discharge Info	orma	ıtion:							D						
Discharge	Loc	ation	<u>.</u>							eivi ter S	ng <u>tatio</u>	<u>n</u>	Z	Volu	<u>ne</u>
Arroyo	Las	<u>Posi</u>	<u>tas</u>						<u>T</u>	FC-	R003	<u>3</u>		-	_0
6. Comments: System secured 6/10/08 due to concerns regarding W-2012 pump cycling on and off. It has not been restarted due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.															
7. I certify that the information in this report, to the best of my knowledge, is true and correct.															
Operator Signatu	ıre: _	<u> </u>	W	K,	<u> [</u>	/			emotivismo.		Dat	e: <u>12</u>	-04-	2008	

Self-Monitoring Report LLNL GAC Treatment Unit 07 (GTU07) AREA TFE-HS

1. Reporting Period: Business Month	December	Year 2008

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

November 27 28 29 30

December 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15

16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): _0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-2105 W-2012	0	0.0
		0.0
Total:	U	0.0

5. Discharge Information:

Discharge Location	Receiving Water Station	Volume
Arroyo Las Positas	TFC-R003	0

6. Comments:

System secured 6/10/08 due to concerns regarding W-2012 pump cycling on and off. It has not been restarted due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the inform	nation in this report, to the best	of my knowledge, is true and correct.
		of my knowledge, is true and correct. Date: 01-06-2009
Operator Signature:	y lec-	Date: <u>01-06-2009</u>

Self-Monitoring Report LLNL Portable Treatment Unit 9 (PTU9) AREA TFE-NW

1. Reporting Period: Business Month October Year 2008 2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged October <u>01</u> <u>02</u> <u>03</u> <u>04</u> <u>05</u> <u>06</u> <u>07</u> <u>08</u> <u>09</u> <u>10</u> <u>11</u> <u>12</u> <u>13</u> <u>14</u> <u>15</u> <u>16</u> <u>17</u> <u>18</u> <u>19</u> <u>20</u> <u>21</u> <u>22</u> <u>23</u> <u>24</u> <u>25</u> <u>26</u> <u>27</u> <u>28</u> <u>29</u> <u>30</u> 31 Total monthly time facility operated (hours): 728 3. Monthly Compliance Data: Date compliance sampling performed (m/d/y): 10-07-2008 Influent pH: Effluent pH: Effluent Temperature (°C): 4. Wellfield Data: Monthly Instantaneous Source Volume(gal) Flow Rate(gpm) W-1211 834,918 19.3 W-1409 0.0 Total: 834,922 19.3 5. Discharge Information: Receiving Discharge Location Water Station Volume _Arroyo Las Positas TFC-R003 834,922 6. Comments: W-1409 well pump failed on 5/6/08, repairs pending. System secured on 10/30/08 for wildlife mitigation. 7. I certify that the information in this report, to the best of my knowledge, is true and correct. ____ Date: 11-06-2008 Operator Signature:

Self-Monitoring Report LLNL Portable Treatment Unit 9 (PTU9) AREA TFE-NW

1. Reporting Period: Business Month November Year 2008 2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged November 01 02 03 <u>04 05 06 07 08 09 10 11 12 13 14 15</u> <u>16</u> <u>17</u> <u>18</u> <u>19</u> <u>20</u> <u>21</u> <u>22</u> <u>23</u> <u>24</u> <u>25</u> <u>26</u> Total monthly time facility operated (hours): 530 3. Monthly Compliance Data: Date compliance sampling performed (m/d/y): 11-17-2008 Influent pH: Effluent pH: Effluent Temperature (°C): 4. Wellfield Data: Monthly Instantaneous Source Volume(gal) Flow Rate(gpm) W-1211 608,518 18.6 W-1409 0 0.0Total: 608,518 18.6 5. Discharge Information: Receiving Discharge Location Water Station Volume Arroyo Las Positas TFC-R003 608,518 6. Comments: W-1409 well pump failed on 5/6/08, repairs pending. System secured from 10/30/08 to 11/4/08 for wildlife mitigation. 7. I certify that the information in this report, to the best of my knowledge, is true and correct. Operator Signature: _____ Date: 12-04-2008

Self-Monitoring Report LLNL Portable Treatment Unit 9 (PTU9) AREA TFE-NW

Reporting Period: Business Month <u>December</u> Year <u>2008</u>
 Dates (in **bold** and <u>underline</u>) treated ground water was discharged

Total monthly time facility operated (hours): <u>852</u>

3. Monthly Compliance Data:

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-1211 W-1409	935,146 0	18.5 0.0
Total:	935,146	18.5

5. Discharge Information:

	Receiving	
Discharge Location	Water Station	Volume
Arrovo Las Positas	TFC-R003	935.146

6. Comments:

W-1409 well pump failed on 5/6/08, repairs pending.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 01-06-2009

Self-Monitoring Report LLNL Mini Treatment Unit 04 (MTU04) AREA TFE-SE

1. Reporting Perio	d: Business	Month	_0	ctobe	er '	Year	2008	3						
2. Dates (in bold a	and underli	ine) tre	ated g	groun	ıd wa	iter v	vas d	isch	arge	d				
October 0	1 02 03 6 17 18	04 05 19 20		07			10 25	11 26	12 27	13 28	14 29	15 30	31	
Total monthly	time facilit	y operat	ed (h	ours)		0								
3. Monthly Compl	iance Data:													
Date complian Influent pH: Effluent pH: Effluent Temp			med (m/d/	y): <u>N</u>	lot N	<u> Ieası</u>	ıred						
4. Wellfield Data:														
Monthly Instantaneous Source Volume(gal) Flow Rate(gpm)														
W-359		0		0.0)									
Total:		0		0.0	<u>)</u>	į								
5. Discharge Inform	nation:					D	: : .							
Discharge L	ocation						eivii ter S	_	<u>n</u>	Z	/olu1	<u>ne</u>		
Arroyo La	as Positas					<u>T</u>	FC-	R003	3		-	_0		
6. Comments: Facility faile pump has no facility will I restart. Facil 7. I certify that the Operator Signature	ot been replated to the restarted ity did not of information	once the operate in this	the fe pume the	acilit np is mon	y has repla th of	s not iced a Octo	oper and tober.	ated he fa kno	sinc acilit	e 4/2 y is r lge, i	2/08. eady	The for a	a	rect
	~	~	THE REAL PROPERTY.											

Self-Monitoring Report LLNL Mini Treatment Unit 04 (MTU04) AREA TFE-SE

1. Reporting Peri	iod:	Busi	ness	Moı	nth	_No	ovem	<u>ber</u>	Ye	ar <u>2(</u>	<u>800</u>					
2. Dates (in bold	d and	d <u>un</u>	derli	<u>ne</u>)	trea	ted g	grour	nd wa	ater v	vas d	lisch	arge	d			
November		02 17		04 19		06 21	07 22	08 23				12	13	14	15	
Total monthl	ly tir	ne fa	acilit	у ор	erate	d (h	ours)		0							
3. Monthly Com	pliar	nce D	Data:													
Date complia Influent pH: Effluent pH: Effluent Ten					form	ned (m/d/	y): <u>N</u>	lot M	<u>Ieas</u>	<u>ured</u>					
4. Wellfield Data	ı:															
Source	Monthly Instantaneous Source Volume(gal) Flow Rate(gpm)															
W-359				0			0.0)								
Total:	-			0			0.0	<u>)</u>								
5. Discharge Info	orma	tion:							Das	\ 						
Discharge	Loca	ation	•							eivii ter S	_	<u>n</u>	Ž	/olur	<u>ne</u>	
_Arroyo]	Las]	Posi	<u>tas</u>						<u>T</u>	FC-	R003	3		_	_0	
6. Comments: Facility shi to a FY 200 pending av	08 fı	undir	ng re	duct	ion,	facil	ities									
7. I certify that th	e in	form	ation	ı in t	his r	epor	t, to	the b	est o	f my	kno	wled	lge, i	s true	e and	correct
Operator Signatu	re:/_	1/1		4		~				***************************************	Date	e: <u>12</u>	<u>-04-</u>	<u> 2008</u>		

Self-Monitoring Report LLNL Mini Treatment Unit 04 (MTU04) AREA TFE-SE

1. Reporting Per	riod:	Busi	ness	Moı	nth	_De	cem	<u>ber</u>	Yea	ar <u>20</u>	08					
2. Dates (in bole	d and	d <u>un</u>	derli	<u>ne</u>)	trea	ted g	roun	d wa	ater v	vas d	lisch	argeo	d			
November December	27 01 16	28 02 17		30 04 19	05 20	06 21			09 24		11 26	12 27		14 29	15 30	31
Total month	ly tiı	me fa	acilit	у ор	erate	d (ho	ours)	• *************************************	0							
3. Monthly Com	pliar	nce I)ata:													
Date compli Influent pH: Effluent pH: Effluent Ten				-	form	ied (1	m/d/ː	y): <u>N</u>	ot M	Ieası	ured					
4. Wellfield Data	a:															
Source		Mon <u>Volu</u>	•	gal)			aneoi ate(g									
W-359				0			0.0)								
Total:	•			<u>0</u>			0.0)								
5. Discharge Info	orma	ition:							ъ							
Discharge	Loc	ation	<u>l</u>							eivii ter S	ng <u>tatio</u>	<u>n</u>	Z	/oluı	<u>me</u>	
Arroyo	Las	Posi	<u>tas</u>						<u>T</u>	FC-	R003	<u>3</u>			_0	
6. Comments: Facility shut down on 4/2/08 due to pump failure in W-359, repairs pending. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.																
7. I certify that the	7. I certify that the information in this report, to the best of my knowledge, is true and correct.															
Operator Signatu	ıre: /	V//	U (M	~				PROFESSION SECRETARISTS SECRETA	Date	e: <u>01</u>	-06-	2009)	

Self-Monitoring Report LLNL Mini Treatment Unit 03 (MTU03) AREA TFE-SW

1. Reporting Period: Business Month October Year 2008

2. Dates (in **bold** and underline) treated ground water was discharged

Total monthly time facility operated (hours): 738

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>10-01-2008</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>24.4</u>

4. Wellfield Data:

Source	Monthly <u>Volume(gal)</u>	Instantaneous Flow Rate(gpm)
W-1520 W-1518 W-1522	34 0 56,616	2.1 0.0 1.3
Total:	<u>56,650</u>	3.4

5. Discharge Information:

Arroyo Las Positas	TFC-R003	56,650
Discharge Location	Water Station	Volume
	Receiving	

6. Comments:

W-1520 operated only to collect samples on 10/16/08. Samples collected were E601 and E906. W-1518 was discovered non operational on 9/8/08. Unable to restart pump.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Kin Amin MSr Date: 11-05-2008

Self-Monitoring Report LLNL Mini Treatment Unit 03 (MTU03) AREA TFE-SW

1. Reporting Period: Business Month November Year 2008

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

Total monthly time facility operated (hours): <u>619</u>

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>11-06-2008</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>18.8</u>

4. Wellfield Data:

, C.	Monthly	Instantaneous	
Source	Volume(gal)	Flow Rate(gpm)	
W-1520	0	* 0.0	
W-1518	0	0.0	
W-1522	48,084	1.3	
Total:	<u>48,084</u>	<u>1.3</u>	

5. Discharge Information:

Discharge Location	Water Station	<u>Volume</u>	
Arroyo Las Positas	TFC-R003	48,084	

6. Comments:

Facility continues to operate with one well-W-1522. W-1520 was secured due high Tritium concentrations. W-1518 is down due to a failed extraction well pump.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 12-02-2008

Self-Monitoring Report LLNL Mini Treatment Unit 03 (MTU03) AREA TFE-SW

1. Reporting Period: Business Month <u>December</u> Year <u>2008</u>

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

November <u>27</u> <u>28</u> <u>29</u> <u>30</u>

December $\frac{\overline{01}}{16}$ $\frac{\overline{02}}{17}$ $\frac{\overline{03}}{18}$ $\frac{\overline{04}}{19}$ $\frac{\overline{05}}{20}$ $\frac{\overline{06}}{21}$ $\frac{\overline{07}}{22}$ $\frac{\overline{08}}{23}$ $\frac{\overline{09}}{24}$ $\frac{\overline{10}}{25}$ $\frac{\overline{11}}{26}$ $\frac{\overline{12}}{27}$ $\frac{\overline{13}}{28}$ $\frac{\overline{14}}{29}$ $\frac{\overline{15}}{30}$ $\frac{\overline{31}}{31}$

Total monthly time facility operated (hours): 835

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>12-04-2008</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>16</u>

4. Wellfield Data:

	Monthly	Instantaneous
<u>Source</u>	Volume(gal)	Flow Rate(gpm)
W 1500	0	0.0
W-1520	0	0.0
W-1518	0	0.0
W-1522	61,655	1.3
Total:	61,655	<u>1.3</u>

5. Discharge Information:

Discharge Location	Water Station	Volume
Arroyo Las Positas	TFC-R003	61,655

6. Comments:

W1520 down due to elevated tritium levels. W-1518 down due to a non-operational pump.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Manua Date: 01-06-2009

Self-Monitoring Report LLNL Mini Treatment Unit 05 (MTU05) AREA TFE-W

1. Reporting Period: Business Month October Year 2008

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

Total monthly time facility operated (hours): 717

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>10-15-2008</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	20.5

4. Wellfield Data:

Source	Monthly <u>Volume(gal)</u>	Instantaneous Flow Rate(gpm)
W-305 W-292	381,518 260,190	8.8 6.0
Total:	641,708	14.8

5. Discharge Information:

Discharge Location Water Station Volume	Arroyo Las Positas	TFC-R003	641,708
	Discharge Location		Volume

6. Comments:

Did not operate on 10/31/2008 to support wildlife biologist activities.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 11-05-2008

Self-Monitoring Report LLNL Mini Treatment Unit 05 (MTU05) AREA TFE-W

1. Reporting Period: Business Month November Year 2008

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

November 01 02 03 $\underbrace{04}_{16}$ $\underbrace{05}_{17}$ $\underbrace{06}_{18}$ $\underbrace{07}_{20}$ $\underbrace{08}_{21}$ $\underbrace{09}_{22}$ $\underbrace{10}_{24}$ $\underbrace{11}_{25}$ $\underbrace{12}_{26}$ $\underbrace{13}_{14}$ $\underbrace{15}_{15}$

Total monthly time facility operated (hours): <u>518</u>

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>11-06-2008</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>19.7</u>

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-305 W-292	274,482 184,871	8.8 5.9
Total:	459,353	14.7

5. Discharge Information:

	Receiving	
Discharge Location	Water Station	<u>Volume</u>
Arroyo Las Positas	TFC-R003	459,353

6. Comments:

Facility was down from 10/31 through 11/3 for North Ditch Work (Wildlife work).

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 12-03-2008

Self-Monitoring Report LLNL Mini Treatment Unit 05 (MTU05) AREA TFE-W

1. Reporting Period: Business Month <u>December</u> Year <u>2008</u>

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

Total monthly time facility operated (hours): __785

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 11-27-2008
Influent pH: 7.0
Effluent pH: 7.5
Effluent Temperature (°C): 19.3

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-305	419,362	8.8
W-292	281,995	6.0
Total:	701,357	14.8

5. Discharge Information:

	Receiving	
Discharge Location	Water Station	Volume
Arroyo Las Positas	TFC-R003	701,357

6. Comments:

Facility failed late Friday 12/19/08 due to a high sump level in the air stripper. Facility was restarted on 12/22/08.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 01-06-2009

Self-Monitoring Report LLNL Vapor Extraction System 16 (VES16) AREA VTFE-ELM

1. Reporting Period: Business Month October Year 2008

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

October 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

3. Wellfield Data:

	Monthly 1	Instantaneous		H	Iours	
Source	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	<u>Γ(°F)</u> ο	f Op.	
W-1909	0	0.0	0	0	0	
W-1903	0	0.0	0	0	0	
W-2305	0	0.0	0	0	0	
W-543-003	0	0.0	0	0	0	
W-543-001	0	0.0	0	0	0	
W-543-1908	0	0.0	0	0	0	
Total:	<u>0</u>	0.0				

4. Comments:

This treatment facility was shut down on 2/06/08. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

5.	I certify the	hat the	information	in this repo	it, to the b	est of my	knowledge,	is true and	correct
				The state of the s	,		11110 1110 450,	is a de alla	COLLOCT

Operator Signature: _______ Date: <u>11-06-2008</u>

Self-Monitoring Report LLNL Vapor Extraction System 16 (VES16) AREA VTFE-ELM

- 1. Reporting Period: Business Month November Year 2008
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

November 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26

3. Wellfield Data:

	Monthly	Instantaneous		F	Hours
Source	Volume(cu. ft	Flow Rate(scfm)	P(in. Hg)	<u>T(°F)</u> o	of Op.
W-1909	0	0.0	0	0	0
W-1903	0	0.0	0	0	0
W-2305	0	0.0	0	0	0
W-543-003	0	0.0	0	0	0
W-543-001	0	0.0	0	0	0
W-543-1908	0	0.0	0	0	0
Total:	<u>0</u>	0.0			

4. Comments:

This treatment facility was shut down on 2/06/08. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

Operator Signature: _______ Date: 12-04-2008

Self-Monitoring Report LLNL Vapor Extraction System 16 (VES16) AREA VTFE-ELM

- 1. Reporting Period: Business Month <u>December</u> Year <u>2008</u>
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

November 27 28 29 30

December 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15

16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

3. Wellfield Data:

	Monthly	Instantaneous		F	Iours
Source	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	<u>T(°F)</u> c	of Op.
W-1909	0	0.0	0	0	0
W-1903	0	0.0	0	0	0
W-2305	0	0.0	0	0	0
W-543-003	0	0.0	0	0	0
W-543-001	0	0.0	0	0	0
W-543-1908	0	0.0	0	0	0
Total:	<u>0</u>	0.0	73.215743342422	50 900 11 50 44 11 4 14 14 14 14 14 14 14 14 14 14 1	

4. Comments:

This treatment facility was shut down on 2/06/08. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Mull Mate: 01-06-2009

Self-Monitoring Report LLNL Vapor Extraction System 12 (VES12) AREA VTFE-HS

- 1. Reporting Period: Business Month October Year 2008
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

Mesmin

October 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

3. Wellfield Data:

	Monthly	Instantaneous		H	Iours
Source	Volume(cu. ft	Flow Rate(scfm)	P(in. Hg)	<u>T(°F)</u> o	f Op.
W-ETS-2010	0 O	0.0	0	0	0
W-ETS-2010	A 0	0.0	0	0	0
W-ETS-2009	0	0.0	0	0	0
W-ETS-2008	6A 0	0.0	0	0	0
W-ETS-2008	B 0	0.0	0	0	0
W-2105	0	0.0	0	0	0
Total:	<u>0</u>	0.0			

4. Comments:

Facility did not operate in the month of Oct. 2008. Facility failed on 3/10/08 due to a catastrophic motor failure in the liquid ring vacuum pump. DOE and the regulatory agencies were notified of this action. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signatures

_Date: 11-11-2008

Self-Monitoring Report LLNL Vapor Extraction System 12 (VES12) AREA VTFE-HS

- 1. Reporting Period: Business Month November Year 2008
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

November 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26

3. Wellfield Data:

	Monthly	Instantaneous		H	Iours
Source	Volume(cu. f	t) Flow Rate(scfm)	<u>P(in. Hg)</u> '	<u>T(°F)</u> o	f Op.
W-ETS-2010)B 0	0.0	0	0	0
W-ETS-2010)A 0	0.0	0	0	0
W-ETS-2009	0	0.0	0	0	0
W-ETS-2008	8A 0	0.0	0	0	0
W-ETS-2008	BB 0	0.0	0	0	0
W-2105	0	0.0	0	0	0
Total:	<u>0</u>	0.0			

4. Comments:

Facility did not operate in the month of Nov. 2008. Facility failed on 3/10/08 due to a catastrophic motor failure in the liquid ring vacuum pump. DOE and the regulatory agencies were notified of this action. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 12-02-2008

Self-Monitoring Report LLNL Vapor Extraction System 12 (VES12) AREA VTFE-HS

1. Reporting Period: Business Month <u>December</u> Year <u>2008</u>

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

November 27 28 29 30 December 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

3. Wellfield Data:

	Monthly	Instantaneous		H	Iours
Source	Volume(cu. ft	Flow Rate(scfm)	P(in. Hg)	<u>Γ(°F)</u> ο	f Op.
W-ETS-2010	B 0	0.0	0	0	0
W-ETS-2010	A 0	0.0	0	0	0
W-ETS-2009	0	0.0	0	0	0
W-ETS-2008	A 0	0.0	0	0	0
W-ETS-2008	B 0	0.0	0	0	0
W-2105	0	0.0	0	0	0
Total:	<u>0</u>	0.0			

4. Comments:

Facility did not operate in the month of Dec. 2008. Facility failed on 3/10/08 due to a catastrophic motor failure in the liquid ring vacuum pump. DOE and the regulatory agencies were notified of this action. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 01-06-2009

Self-Monitoring Report LLNL GAC Treatment Unit 01 (GTU01) AREA TFG-1

1. Reporting Per	riod: Business Mon	th <u>October</u>	Year <u>2008</u>	
2. Dates (in bol	d and <u>underline</u>)	treated ground w	ater was discharge	d
October	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\frac{13}{28} \frac{14}{29} \frac{15}{30} \frac{31}{31}$
Total month	ly time facility ope	erated (hours):	736	
3. Monthly Com	pliance Data:			
Influent pH: Effluent pH:	: mperature (°C):	Formed (m/d/y):	10-07-2008 7.0 7.0 18.8	
4. Wellifeld Dat	u.			
Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm	<u>)</u>	
W-1111	393,248	8.8		
Total:	393,248	<u>8.8</u>		
5. Discharge Info	ormation:			
Discharge	Location		Receiving Water Station	Volume
Arroyo	Seco		TFG-ASW	393,248
6. Comments:				
7. I certify that the operator Signatu	Way U	nis report, to the	best of my knowled	lge, is true and correct.

Land Observation Report date: TFG-ASW - Arroyo Seco

1.	1. Reporting Period: Business Month October Year 2008				
2.	Date compliance sampling performed <u>10-07-2008</u>				
3.	Weather Conditions:				
	Average air tempertaure (°C): 6-day total precipitation (in): Average wind speed/direction (mph):	17.5 .25 5/ SSW			
4.	Receiving Data:				
	Sample Location pH Temperature (C) Receiving Water N/M N/M				
5.	Land Observations, as "Yes" or "No", for reporting r	nonth:			
	Visual Observations	<u>Effluent</u>	Receiving Water		
	Floating and Suspended Materials of Waste Origin Odor Discoloration and Turbidity Evidence of Beneficial Water Use	No Not Required Not Required	No No No N/A		
6.	Comments:				
7.	I certify that the information in this report, to the bes	t of my knowledge, i	s true and correct.		
	Operator Signature:	Date: <u>11-0</u>	6-2008		

Self-Monitoring Report LLNL GAC Treatment Unit 01 (GTU01) AREA TFG-1

1. Reporting Period	: Business Mon	th November	Year <u>2008</u>	
2. Dates (in bold an	nd <u>underline</u>)	treated ground wa	ter was discharg	ged
		05 06 07 08 20 21 22 23		2 13 14 15
Total monthly t	ime facility ope	rated (hours):	<u>622</u>	
3. Monthly Complia	ance Data:			
Date complianc Influent pH: Effluent pH: Effluent Tempe	1 01	formed (m/d/y):	$ \begin{array}{r} \underline{11\text{-}20\text{-}2008} \\ \underline{7.0} \\ \underline{7.5} \\ \underline{20} \end{array} $	
4. Wellfield Data:				
Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)		
W-1111	332,242	8.9		
Total:	332,242	8.9		
5. Discharge Inform	ation:		D	
Discharge Lo	cation		Receiving Water Station	Volume
Arroyo Sec	<u>•0</u>		TFG-ASW	_332,242
6. Comments: Carbon chang	e scheduled for	12/9/08.		
7. I certify that the is	nformation in th	nis report, to the b	est of my know	ledge, is true and correct.
Operator Signature: Date: <u>12-04-2008</u>				
		and the second s	Dato.	1201200

Land Observation Report date: TFG-ASW - Arroyo Seco

1. Reporting Period: Business Month November Year 2008

2.	Date compliance sampling performed <u>11-20-2008</u>		
3.	Weather Conditions:		
	Average air tempertaure (°C): 6-day total precipitation (in): Average wind speed/direction (mph):	14.7 0 3/ SE	
4.	Receiving Data:		
	Sample Location pH Temperature (C) Receiving Water N/M N/M		
5.	Land Observations, as "Yes" or "No", for reporting a	month:	
	Visual Observations	<u>Effluent</u>	Receiving Water
	Floating and Suspended Materials of Waste Origin Odor Discoloration and Turbidity Evidence of Beneficial Water Use	No Not Required Not Required	<u>No</u> <u>No</u> <u>No</u> <u>N/A</u>
6.	Comments:		
7.	I certify that the information in this report, to the best	st of my knowledge,	

Self-Monitoring Report LLNL GAC Treatment Unit 01 (GTU01) AREA TFG-1

1. Reporting Peri	od: Business Mon	th <u>December</u>	Year <u>2008</u>	
2. Dates (in bold	and <u>underline</u>)	treated ground w	ater was discharge	d
November December	27 28 29 30 01 02 03 04 16 17 18 19	$\frac{05}{20}$ $\frac{06}{21}$ $\frac{07}{22}$ $\frac{08}{23}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\frac{13}{28} \frac{14}{29} \frac{15}{30} \frac{31}{31}$
Total monthl	y time facility ope	rated (hours):	787	
3. Monthly Comp	oliance Data:			
Influent pH: Effluent pH:	ance sampling perf	formed (m/d/y):	12-18-2008 7.5 7.5 19.2	
4. Wellfield Data	:			
Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)	Σ	
W-1111	421,484	8.9		
Total:	421,484	<u>8.9</u>		
5. Discharge Info	rmation:		Danainina	
Discharge 1	Location		Receiving Water Station	Volume
Arroyo S	Seco		TFG-ASW	421,484
6. Comments: Carbon cha	inged on 12/9/08.			
7. I certify that th	e information in th	nis report, to the l	est of my knowled	dge, is true and correct
Operator Signatu	re://////	ll	Date: 0	1-06-2009

Land Observation Report date: TFG-ASW - Arroyo Seco

1.	Reporting Period: Business Month <u>December</u> Year	2008	
2.	Date compliance sampling performed <u>12-18-2008</u>		
3.	Weather Conditions:		
	Average air tempertaure (°C): 6-day total precipitation (in): Average wind speed/direction (mph):	<u>5.4</u> . <u>54</u> <u>5/ SSE</u>	
4.	Receiving Data:		
	Sample Location pH Temperature (C) Receiving Water N/M N/M		
5.	Land Observations, as "Yes" or "No", for reporting a	month:	
	<u>Visual Observations</u>	Effluent	Receiving Water
	Floating and Suspended Materials of Waste Origin Odor Discoloration and Turbidity Evidence of Beneficial Water Use	No No Not Required Not Required	<u>No</u> <u>No</u> <u>No</u> <u>N/A</u>
6.	Comments: No water at sampling location.		
7.	I certify that the information in this report, to the best Operator Signature:	t of my knowledge, Date: 01-0	

Self-Monitoring Report LLNL Mini Treatment Unit 02 (MTU02) AREA TFG-N

1. Reporting Period: Business Month October Year 2008 2. Dates (in **bold** and underline) treated ground water was discharged 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 October 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 Total monthly time facility operated (hours): _0 3. Monthly Compliance Data: Date compliance sampling performed (m/d/y): Not Measured Influent pH: Effluent pH: Effluent Temperature (°C): 4. Wellfield Data: Monthly Instantaneous Volume(gal) Source Flow Rate(gpm) W-1807 0.0 0 W-1806 0 0.0 Total: 0 0.05. Discharge Information: Receiving Discharge Location Water Station Volume Arroyo Las Positas TFC-R003 0 6. Comments: System shut down on 6/20/08 due to high sump alarm. System secured until repairs can be made. It has not been restarted due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources. 7. I certify that the information in this report, to the best of my knowledge, is true and correct. _____ Date: 11-06-2008 Operator Signature:////

Self-Monitoring Report LLNL Mini Treatment Unit 02 (MTU02) AREA TFG-N

1. Reporting Period: Business Month November Year 2008 2. Dates (in **bold** and underline) treated ground water was discharged November 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 Total monthly time facility operated (hours): 0 3. Monthly Compliance Data: Date compliance sampling performed (m/d/y): Not Measured Influent pH: Effluent pH: Effluent Temperature (°C): 4. Wellfield Data: Monthly Instantaneous Source Volume(gal) Flow Rate(gpm) W-1807 0 0.0 W-1806 0 0.0 Total: 0 0.0 5. Discharge Information: Receiving Discharge Location Water Station Volume **Arroyo Las Positas TFC-R003** 0 6. Comments: System shut down on 6/20/08 due to high sump alarm. System secured until repairs can be made. It has not been restarted due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources. 7. I certify that the information in this report, to the best of my knowledge, is true and correct. Date: 12-04-2008 Operator Signature:

Self-Monitoring Report LLNL Mini Treatment Unit 02 (MTU02) AREA TFG-N

1. Reporting Period: Business Month <u>December</u> Year <u>2008</u> 2. Dates (in **bold** and underline) treated ground water was discharged November 27 28 29 30 December 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 Total monthly time facility operated (hours): _0 3. Monthly Compliance Data: Date compliance sampling performed (m/d/y): Not Measured Influent pH: Effluent pH: Effluent Temperature (°C): 4. Wellfield Data: Monthly Instantaneous Volume(gal) Source Flow Rate(gpm) W-1807 0 0.0 W-1806 0 0.0 Total: 0 0.05. Discharge Information: Receiving Discharge Location Water Station Volume Arroyo Las Positas TFC-R003 0 6. Comments: System shut down on 6/20/08 due to high sump alarm. System secured until repairs can be made. It has not been restarted due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources. 7. I certify that the information in this report, to the best of my knowledge, is true and correct. _____ Date: **01-06-2009** Operator Signature:

Self-Monitoring Report LLNL Portable Treatment Unit 5 (PTU5) AREA TF406

1. Reporting Period: Business Month October Year 2008

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

October 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 29

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>10-16-2008</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>22.9</u>

4. Wellfield Data:

	Monthly	Instantaneous
Source	Volume(gal)	Flow Rate(gpm)
W-1309	821	0.0
W-1310	23,677	0.0
GSW-445	904	4.5
Total:	25,402	4.5

5. Discharge Information:

Dischaus I sestion	Receiving	X 7 - 1
Discharge Location	Water Station	Volume
_Arroyo Las Positas	TFC-R003	25,402

6. Comments:

System operations limited to manned/day time operations only due to system evaluation and assessment of operating parameters as well as the collection of BAAQMD samples and readings.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 12-08-2008

Self-Monitoring Report LLNL Portable Treatment Unit 5 (PTU5) AREA TF406

1. Reporting Period: Business Month November Year 2008

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

November 01 02 <u>03</u> <u>04</u> <u>05</u> <u>06</u> <u>07</u> 08 09 10 11 12 13 14 15 16 <u>17</u> <u>18</u> <u>19</u> <u>20</u> <u>21</u> <u>22</u> <u>23</u> <u>24</u> <u>25</u> <u>26</u>

Total monthly time facility operated (hours): <u>271</u>

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>11-01-2008</u>
Influent pH:	<u>7.5</u>
Effluent pH:	7.5
Effluent Temperature (°C):	<u>23</u>

4. Wellfield Data:

	Monthly	Instantaneous
Source	Volume(gal)	Flow Rate(gpm)
W 1200	0	0.0
W-1309	U	0.0
W-1310	174,108	5.2
GSW-445	0	0.0
Total:	174,108	<u>5.2</u>

5. Discharge Information:

Discharge Location	Receiving <u>Water Station</u>	Volume
Arroyo Las Positas	TFC-R003	174,108

6. Comments:

System operations limited to manned/day time operations only on 11/3/08 and 11/4/08 due to system evaluation and assessment of operating parameters as well as the collection of BAAQMD samples and readings. Normal system operations 11/5/08 to 11/7/08 then secured to prepare for step test of W-1310. 11/17/08 W-1310 step test started.

7. I certify that the in	nformation in this report, to the	best of my knowledge, is true and correct.
	full lun	•
Operator Signature: .	full for	Date: <u>12-08-2008</u>

Self-Monitoring Report LLNL Portable Treatment Unit 5 (PTU5) AREA TF406

1. Reporting Period: Business Month <u>December</u> Year <u>2008</u>

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

Total monthly time facility operated (hours): 848

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>12-16-2008</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>22.1</u>

4. Wellfield Data:

Source	Monthly Volume(gal)	Instantaneous Flow Rate(gpm)
W-1309 W-1310 GSW-445	0 793,857 0	0.0 16.0 0.0
Total:	793,857	<u>16.0</u>

5. Discharge Information:

Discharge Location	Water Station	Volume
Arrovo Las Positas	TFC-R003	793,857

Daggiving

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 01-06-2009

Self-Monitoring Report LLNL GAC Treatment Unit 03 (GTU03) AREA TF406-NW

1. Reporting Perio	od: Bus	siness	Moı	nth	_00	ctobe	er '	Year	2008	3					
2. Dates (in bold	and <u>u</u>	nderl	ine)	trea	ted g	roun	ıd wa	ater v	vas d	lisch	arge	d			
	01 02 16 17		04 19	05 20		07 22			10 25	11 26	12 27	13 28	14 29	15 30	31
Total monthly time facility operated (hours): _0															
3. Monthly Comp	liance	Data:													
Date compliation Influent pH: Effluent pH: Effluent Tem		•		form	ned (1	m/d/	y): <u>N</u>	lot M	<u>Ieas</u>	ured					
4. Wellfield Data:															
Source		nthly ume(aneo ate(g		,							
W-1801			0			0.0)								
Total:	ENGLISHMAN		0			0.0	<u>)</u>								
5. Discharge Info	rmation	n:						D							
Discharge I	_ocatio	<u>n</u>							ceivii ter S	_	<u>n</u>	Ž	Volu	<u>me</u>	
Arroyo L	as Pos	<u>itas</u>						<u>T</u>	FC-	R003	<u>3</u>			_0	
6. Comments: System sect 2008 fundir available sta	ng redu	ction	, faci	lities	_	_	_			_					
7. I certify that the	e inform	natio	n in t	his r	epor	t, to	the b	est o	f my	kno	wlec	lge, i	s tru	e and	l correct
Operator Signatur	e: <u>///</u>	[10]		[1	//					Dat	e: <u>11</u>	-06-	2008	3	

Self-Monitoring Report LLNL GAC Treatment Unit 03 (GTU03) AREA TF406-NW

1. Reporting Peri	nth	November Year 2008				<u>008</u>										
2. Dates (in bold	l and	d <u>un</u>	derli	ne)	trea	ted g	groun	ıd wa	ater v	vas d	lisch	arge	d			
November		02 17	03 18	04 19	05 20	06 21	07 22	08 23			11 26	12	13	14	15	
Total monthl	ly tir	ne fa	acilit	у ор	erate	d (ho	ours)	:	0							
3. Monthly Comp	plian	псе Г)ata:													
Date complia Influent pH: Effluent pH: Effluent Tem			•		form	ned (1	m/d/	y): <u>N</u>	lot M	<u>Ieas</u>	ured					
4. Wellfield Data	ı:															
Source		Mon Volu	-	gal)			aneo ate(g	us gpm)								
W-1801				0			0.0)								
Total:	-			0			0.0	<u>)</u>								
5. Discharge Info	rma	tion:							D							
Discharge 1	Loca	ation								eivii ter S	_	<u>n</u>		Volu	<u>me</u>	
Arroyo I	Las]	Posi	<u>tas</u>						<u>T</u>	FC-	R003	<u>3</u>			_0	
6. Comments: System sec 2008 fundi available st	ng re	educ	tion,	faci	lities											
7. I certify that th	e int	form	atio	n in t	his r	epor	t, to	the b	est o	f my	kno	wled	lge, i	is tru	e and	correct
Operator Signatur	re:	<u> </u>	W	<u> </u>	6	//	~				Date	e: <u>12</u>	2-04-	2008		

Self-Monitoring Report LLNL GAC Treatment Unit 03 (GTU03) AREA TF406-NW

1. Reporting Per	cem	<u>ber</u>	Ye	ar <u>20</u>	08											
2. Dates (in bole	d an	d <u>un</u>	derli	ne)	trea	ted g	rour	ıd wa	ater v	vas d	lisch	arge	d			
November December	09 24		11 26	12 27	13 28	14 29	15 30	31								
Total monthly time facility operated (hours): _0																
3. Monthly Compliance Data:																
Date compliation of the compliant of the	nper				form	ned (1	m/d/	y): <u>N</u>	lot N	<u>Ieası</u>	ured					
4. Wellfield Data	a:															
Source		Mon <u>Volu</u>				stanta ow R										
W-1801				0			0.0)								
Total:	•	e de la recipio de la constanta		<u>0</u>			0.0	<u>)</u>	-							
5. Discharge Info	orma	ition:							_							
Discharge	Loc	ation	Į.							eivii ter S	_	<u>n</u>	Ž	√oluı	<u>ne</u>	
Arroyo]	Las	Posi	<u>tas</u>						<u>T</u>	FC-	R003	3		-	_0	
6. Comments: System sec 2008 fundi available s	ing r	educ	tion,	faci	lities	pun will	np re be r	pairs estar	can ted i	be con a p	ompl riori	eted tized	. Du	ie to er, pe	a FY endir	ng
7. I certify that th	ne in	form	ation	n in t	his r	eport	t, to 1	the b	est o	f my	kno	wled	ge, i	s truc	e and	l correct
Operator Signatu	re: 7	<u> </u>	UA							Thinkeli in constanti bacca	Date	e: <u>01</u>	-06-	<u> 2009</u>		

Self-Monitoring Report LLNL Solar Treatment Unit 09 (STU09) AREA TF518-N

1. Reporting Perio	d: Business	Mon	ıth	_00	ctobe	er '	Year	2008	8					
2. Dates (in bold and <u>underline</u>) treated ground water was discharged														
		04 19		06 21			09 24	10 25	11 26	12 27		14 29	15 30	31
Total monthly time facility operated (hours): _0														
3. Monthly Comp	liance Data:													
Date compliance sampling performed (m/d/y): Not Measured Influent pH: Effluent pH: Effluent Temperature (°C):														
4. Wellfield Data:														
<u>Source</u>	Monthly Volume(~a1)			aneo									
Management of the Control of Cont	v Orume(gar)	LIC	<u>w</u> K	ate(g	gpm)								
W-1410	<u>v orume(</u>	<u>gar)</u>	LIC	<u>ow R</u>	ate(<u>s</u>									
	volume		<u>FIC</u>	OW R)								
W-1410		0	<u> </u>	ow R	0.0)								
W-1410 Total:	mation:	0	<u> </u>	OW R	0.0)	Rec	ceivi ter S	ng tatio	<u>n</u>	Ž	√oluı	me	
W-1410 Total: 5. Discharge Infor	mation:	0	<u>FIC</u>	OW R	0.0)	Rec Wa	ter S	_		<u> </u>	√oluı	<u>me</u>	
W-1410 Total: 5. Discharge Infor	mation: cocation as Positas ent facility very influent.	o o vas sl Due 1	hut c	lown FY 2	0.0 0.0 2008)) 2-20- fund	Rec <u>Wa</u> _T	FC-	R003	3 vated	triti lities	um a		ties
W-1410 Total: 5. Discharge Information Discharge I. Arroyo L. 6. Comments: This treatment in the facility	mation: ocation as Positas ent facility very influent. a prioritized	vas sl Due t l orde	hut c to a :	lown FY 2 endin	0.0 0.0 2008	2-20- fund ailab	Rec Wa T	FC- ue to educaff a	R003 elevetion,	ated faci	triti lities ces.	um a s will	0 ctivi	

Self-Monitoring Report LLNL Solar Treatment Unit 09 (STU09) AREA TF518-N

1. Reporting Peri	Reporting Period: Business Month November Year 2008															
2. Dates (in bold	2. Dates (in bold and <u>underline</u>) treated ground water was discharged															
November		03 18	04 19	05 20	06 21	07 22		09 24	10 25	11 26	12	13	14	15		
Total monthly time facility operated (hours): _0																
3. Monthly Comp	oliance I	Data:														
Influent pH: Effluent pH:	Date compliance sampling performed (m/d/y): Not Measured Influent pH:															
4. Wellfield Data	•															
<u>Source</u>	Mon	ithly ime(g	-01)			aneo										
	<u>v OII</u>	11110()	<u>(a1)</u>	LIC)W K	ate(g	<u>gpm)</u>									
W-1410	<u>v Ort</u>	mie (<u>s</u>	<u>(a1)</u>	FIC	<u>)w K</u>	0.0										
	<u>v ort</u>	e(<u>s</u>		<u> </u>	OW K)									
W-1410			0	<u> </u>	<u> </u>	0.0)	······································								
W-1410 Total:	rmation	:	0	<u>FIC</u>	DW K	0.0)	Rec	eivii ter S	ng tatio	<u>n</u>	Š	√olu	<u>me</u>		
W-1410 Total: 5. Discharge Info	rmation Location	: <u>1</u>	0	FIC	DW K	0.0)	Rec Wa	ter S	_		Š	√olu	<u>me</u>		
W-1410 Total: 5. Discharge Info	rmation Location Las Position ty influent	: itas lity w	o o vas sl Oue 1	hut d	lown FY 2	0.0 0.0	2-20- fund	Rec <u>Wa</u> <u>T</u> 08 di	FC-	R003 elevtion,	ated	triti lities	um a	0	ities	
W-1410 Total: 5. Discharge Info Discharge Arroyo I 6. Comments: This treatment in the facility	rmation Location Las Posi ent faci ty influe a priori	: itas lity w ent. I tized	o orde	hut d to a l er, pe	lown FY 2 endin	0.0 0.0 0.0 0.008	2-20- fund ailab	Reco <u>Wa</u> <u>T</u> 08 do ing role sta	FC-	R003 elevtion,	ated faci sour	triti lities ces.	um a	0 activ		t.

Self-Monitoring Report LLNL Solar Treatment Unit 09 (STU09) AREA TF518-N

1. Reporting Per	riod:	Busi	iness	Moı	nth	_De	cem	<u>ber</u>	Ye	ar <u>20</u>	008					
2. Dates (in bol	d an	d <u>un</u>	derli	<u>ne</u>)	trea	ted g	roun	ıd wa	iter v	vas d	lisch	argeo	d			
November December	27 01 16	28 02 17	29 03 18	30 04 19	05 20	06 21	07 22		09 24	10 25	11 26	12 27	13 28	14 29	15 30	31
Total month	ıly ti	me fa	acilit	у ор	erate	d (ho	ours)	:	0							
3. Monthly Com	nplia	nce I	Data:													
Date compli Influent pH: Effluent pH Effluent Ter	: <u>-</u>				form	ied (i	m/d/	y): <u>N</u>	lot N	Ieası	ured					
4. Wellfield Dat	a:															
Source		Mon <u>Volu</u>	•	gal)		stanta ow R		us gpm)								
W-1410				0			0.0)								
Total:				<u>0</u>			0.0	<u>)</u>	seconstitution de la constitution de la constitutio							
5. Discharge Inf	orma	ation	:						Dag		n ~					
Discharge	Loc	ation	<u>1</u>							ceivii ter S	ng <u>tatio</u>	<u>n</u>	Ž	/olui	<u>me</u>	
Arroyo	Las	Posi	tas						<u>T</u>	FC-	R003	3		-	_0	
6. Comments: This treating in the facing restarted in the second contract of the second con	lity i	nflue	ent.	Due	to a	FY 2	8008	fund	ing r	educ	tion,	faci	lities			ties
7. I certify that t	he in	form	națio	n in 1	1 1				est o	of my	kno	wled	lge, i	s tru	e and	d correct.
Operator Signat	ure: .)(H1 ——		<u>Ca</u>	W W	Jun				Dat	e: <u>02</u>	2-23-	<u> 2009</u>	<u>)</u>	

Self-Monitoring Report LLNL Treatment Facility 518-HDTANK (TF518-HDTANK) AREA TF518-PZ

1. Reporting Period: Business Month October Year 2008

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

October 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): _0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH: __ Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

	Monthly	Instantaneous
Source	Volume(gal)	Flow Rate(gpm)
W-1615	0	0.0
W-518-1913	0	0.0
W-518-1914	0	0.0
W-518-1915	0	0.0
SVB-518-204	0	0.0
SVB-518-201	. 0	0.0
Total:	0	<u>0.0</u>

5. Discharge Information:

Discharge Location	Water Station	Volume
Arroyo Las Positas	TFC-R003	_0

Receiving

6. Comments:

This treatment facility was shut down on 2-27-08 due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to	to the best of my knowledge, is true and correct.
Operator Signature: Sout Cayas	Date: <u>11-03-2008</u>

Self-Monitoring Report LLNL Treatment Facility 518-HDTANK (TF518-HDTANK) AREA TF518-PZ

- 1. Reporting Period: Business Month November Year 2008
- 2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

November 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26

Total monthly time facility operated (hours): _0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH: __ Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

	Monthly	Instantaneous	
Source	Volume(gal)	Flow Rate(gpm)	
W-1615	0	0.0	
W-518-1913	0	0.0	
W-518-1914	0	0.0	
W-518-1915	0	0.0	
SVB-518-204	0	0.0	
SVB-518-201	0	0.0	
Total:	<u>0</u>	<u>0.0</u>	

5. Discharge Information:

Discharge Location	Receiving Water Station	Volume
Arroyo Las Positas	_TFC-R003	_0

6. Comments:

This treatment facility was shut down on 2-27-08 due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to	the best of my knowledge, is true and correct
Operator Signature:	Date: <u>12-01-2008</u>

Self-Monitoring Report LLNL Treatment Facility 518-HDTANK (TF518-HDTANK) AREA TF518-PZ

1. Reporting Period: Business Month <u>December</u> Year 2008

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

November 27 28 29 30 December 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): $\underline{0}$

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

	Monthly	Instantaneous
Source	Volume(gal)	Flow Rate(gpm)
W-1615	0	0.0
W-518-1913	0	0.0
W-518-1914	0	0.0
W-518-1915	0	0.0
SVB-518-20	4 0	0.0
SVB-518-20	1 0	0.0
Total:	0	0.0

5. Discharge Information:

Discharge Location	Receiving Water Station	Volume
Arroyo Las Positas		_0

6. Comments:

This treatment facility was shut down on 2-27-08 due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 12-31-2008

Self-Monitoring Report LLNL Catalytic Reductive Dehalogenation 1 (CRD1) AREA TF5475-1

1. Reporting Period	d: Busi	ness Moi	nth <u>O</u>	ctobe	er '	Year	2008	3					
2. Dates (in bold and <u>underline</u>) treated ground water was discharged													
October 0	1 02 6 17	03 04 18 19	05 06 20 21	07 22			10 25	11 26	12 27	13 28	14 29	15 30	31
Total monthly	time fa	cility op	erated (h	ours)):	0							
3. Monthly Compl	iance D	ata:											
Date compliance sampling performed (m/d/y): Not Measured Influent pH: Effluent pH: Effluent Temperature (°C):													
4. Wellfield Data:													
4. Wellfield Data: Monthly Instantaneous Source Volume(gal) Flow Rate(gpm)													
W-1302-2		0		0.0	0								
Total:		0		0.0	<u>0</u>	-yetavosvosiaama							
5. Discharge Inform	mation:					D	: : .						
Discharge Lo	ocation						eivii ter S	ng tatio	<u>n</u>	Ī	/olur	<u>me</u>	
CRD-1 inj	<u>jection</u>						V-130	<u>02-1</u>			-	_0	
6. Comments: This treatment facility was shut down on 7/27/07. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.													
7. I certify that the information in this report, to the best of my knowledge, is true and correct.													
Operator Signature	:////		<u>///</u>	1		nem		Date	e: <u>11</u>	-06-2	<u>2008</u>		

Self-Monitoring Report LLNL Catalytic Reductive Dehalogenation 1 (CRD1) AREA TF5475-1

1. Reporting Peri	iod: Bus	siness	Mor	nth	_No	vem	<u>ber</u>	Ye	ar <u>20</u>	<u>008</u>					
2. Dates (in bold and <u>underline</u>) treated ground water was discharged															
November 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 Total monthly time facility operated (hours): 0															
Total month	ly time	acility	y op	erate	d (ho	ours)	: _	0							
3. Monthly Compliance Data:															
Date compliance sampling performed (m/d/y): Not Measured Influent pH: Effluent pH: Effluent Temperature (°C):															
4. Wellfield Data	ι:														
Source		nthly ume(g	gal)			aneo ate(g		1							
W-1302-2			0			0.0	0								
W-1302-2 Total:			0			0.0									
	 ormation	1:	The same area						: . :						
Total:			The same area						ceivii ter S	ng tatio	<u>n</u>	7	Volu	<u>me</u>	
Total: 5. Discharge Info	Locatio	<u>n</u>	The same area					<u>Wa</u>		tatio	<u>n</u>		Volu:	<u>me</u>	
Total: 5. Discharge Info <u>Discharge</u>	Location njection nent facilitie	<u>n</u> L	<u>0</u>			0.0	D	<u>Wa</u>	ter S V-13 Oue t	<u>tatio</u> 02-1 o a F	FY 20	008 1	fundi		aff
Total: 5. Discharge Info <u>Discharge</u> <u>CRD-1 i</u> 6. Comments: This treatmereduction,	Location njection nent factifices.	<u>n</u> 1 dity w	o vas si be re	estar	ted i	0.0) 7/27/ oriori	Wa _V 07. I tized	v-13 Oue t	02-1 o a Fer, pe	FY 20 endin	008 f	fundi ailab	ng ole st	

Self-Monitoring Report LLNL Catalytic Reductive Dehalogenation 1 (CRD1) AREA TF5475-1

1. Reporting Per	riod:	Busi	iness	Moı	nth	_De	cem	<u>ber</u>	Ye	ar <u>20</u>	08					
2. Dates (in bol	d an	d <u>un</u>	derli	ine)	trea	ted g	roun	ıd wa	iter v	vas d	lisch	arge	d			
November December	01	28 02 17	03		05 20	06 21	07 22	08 23	09 24		11 26	12 27	13 28	14 29	15 30	31
Total month	ly tii	me fa	acilit	у ор	erate	d (ho	ours)	: _	0							
3. Monthly Com	pliar	nce I	Data:													
Date compli Influent pH: Effluent pH: Effluent Ter					form	ned (1	m/d/ː	y): <u>N</u>	ot N	<u>Ieası</u>	ured					
4. Wellfield Data	a:															
Source		Mon <u>Volu</u>		gal)		tanta		us gpm)								
W-1302-2	,			0			0.0)								
Total:	•			0			0.0	<u>)</u>	3							
5. Discharge Info	orma	ition:							Doo	eivir	.~					
Discharge	Loc	ation	<u>l</u>							ter S	_	<u>n</u>	Ž	Volu	<u>me</u>	
CRD-1	injec	tion								V-130	<u>)2-1</u>			-	_0	
6. Comments: This treatreduction, and resour	facil		•												_	aff
7. I certify that the	ne in	form	ation	ı in-t	his r	éport	t, to 1	he b	est o	f my	kno	wled	lge, i	s tru	e and	l correct
Operator Signatu	ıre:	<u>Mh</u>	U{	6		2					Date	e: <u>01</u>	-06-	<u> 2009</u>)	

Self-Monitoring Report LLNL GAC Treatment Unit 09 (GTU09) AREA TF5475-2

1. Reporting Per	iod:	Busi	ness	Mor	nth	_0	ctobe	er `	Year	2008	3					
2. Dates (in bole	d an	d <u>un</u>	derli	ine)	trea	ted g	grour	ıd wa	ater v	was d	lisch	arge	d			
October	01 16	02 17	03 18	04 19	05 20	06 21	07 22		09 24		11 26	12 27	13 28	14 29	15 30	31
Total month	ly ti	me fa	acilit	у ор	erate	d (h	ours)		0							
3. Monthly Com	plia	nce I	Data:													
Date compli Influent pH: Effluent pH: Effluent Ten	<u>.</u>				form	ned (m/d/	y): <u>N</u>	Not M	<u>Ieas</u>	ured	:				
4. Wellfield Data	a:															
Source		Mon <u>Volu</u>	-	gal)			aneo late(g		<u>!</u>							
W-1108 W-1415				0			0.0 0.0									
Total:	,			0			0.0	<u>)</u>								
5. Discharge Info	orma	ition:														
Discharge	Loc	ation	<u>l</u>							ceivii ter S	_	<u>n</u>	Ž	Volu	<u>me</u>	
Arroyo	Las	Posi	<u>tas</u>						<u>T</u>	FC-	R003	3		•	_0	
6. Comments: This treatmeduction, and resour	facil		•												_	aff
7. I certify that the	ne in	form	atio	n in t	his r	epor	t, to	the b	est o	of my	kno	wled	lge, i	s tru	e and	d correct
Operator Signatu	ıre: 🗡	1/1	W	L	1	L	~		MANAGE AND ASSESSMENT OF THE PARTY OF THE PA		Dat	e: <u>11</u>	-06-	2008	3	

Self-Monitoring Report LLNL GAC Treatment Unit 09 (GTU09) AREA TF5475-2

1. Reporting Peri	iod:	Busi	ness	Mor	nth	_No	vem	ber	Ye	ar <u>20</u>	008					
2. Dates (in bold	l and	d <u>un</u>	derli	<u>ne</u>)	treat	ted g	roun	ıd wa	ater v	vas d	lisch	argeo	d			
November	01 16	02 17		04 19	05 20	06 21	07 22	08 23			11 26	12	13	14	15	
Total monthl	ly tir	ne fa	cilit	у ор	erate	d (ho	ours)	:	0							
3. Monthly Comp	plian	ice D	ata:													
Date complia Influent pH: Effluent pH: Effluent Tem					form	ied (1	m/d/	y): <u>N</u>	lot M	I easi	<u>ured</u>					
4. Wellfield Data	ι:															
Source		Moni Volu	-	gal)			aneo ate(g	us gpm)								
W-1108 W-1415				0 0			0.0 0.0									
Total:	-			0			0.0	<u>)</u>								
5. Discharge Info	rma	tion:							_							
Discharge 1	Loca	ation								eivii ter S	_	<u>n</u>	Ž	/olur	<u>ne</u>	
Arroyo I	Las]	<u>Posit</u>	<u>tas</u>						<u>T</u>	FC-l	R003	<u>3</u>		_	_0	
6. Comments: This treatmed reduction, is and resource.	facil		-												_	ff
7. I certify that th	e inf	form	Ation	ı in t	his r	epor	t, to	the b	est o	f my	kno	wled	ge, i	s truc	e and	correct
Operator Signatu:	re: _	<u> [[[[</u>	[/	<u> </u>	M						Date	e: <u>12</u>	-04-	2008		

Self-Monitoring Report LLNL GAC Treatment Unit 09 (GTU09) AREA TF5475-2

1. Reporting Period: Business Month <u>December</u> Year <u>2008</u>																
2. Dates (in bol	d an	d <u>un</u>	derli	ine)	trea	ted g	groun	ıd wa	ater v	vas d	lisch	arge	1			
November December																
Total month	ıly ti	me fa	acilit	y op	erate	d (h	ours)	:	0							
3. Monthly Compliance Data:																
Date compliance sampling performed (m/d/y): Not Measured Influent pH: Effluent pH: Effluent Temperature (°C):																
4. Wellfield Dat																
Source	4. Wellfield Data: Monthly Instantaneous Source Volume(gal) Flow Rate(gpm)															
W-1108 W-1415				0			0.0 0.0									
Total:	•			0	Manual Andrews		0.0	<u>)</u>								
5. Discharge Info	orma	ition	:						TD.							
Discharge	Loc	ation	<u>1</u>							eivii ter S	_	<u>n</u>	Ž	Volu:	<u>me</u>	
Arroyo	Las	<u>Posi</u>	<u>tas</u>						<u>T</u>	FC-	R003	3			_0	
6. Comments: This treatment facility was shut down on 2/27/08. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.																
7. I certify that the information in this report, to the best of my knowledge, is true and correct																
Operator Signatu	ıre: 7	<u> [la</u>	U			_					Dat	e: 01	-06-	2009)	

Self-Monitoring Report LLNL Catalytic Reductive Dehalogenation 2 (CRD2) AREA TF5475-3

1. Reporting Per	iod.	Busi	ness	Mor	nth	00	tobe	, oli	Year	2008	₹					
2. Dates (in bold and <u>underline</u>) treated ground water was discharged																
2. Dates (in bol	d and	d <u>un</u>	derli	ne)	trea	ted g	roun	id wa	iter v	vas d	isch	arge	d			
October	01 16	02 17		04 19	05 20	06 21	07 22	08 23	09 24	10 25	11 26	12 27	13 28	14 29	15 30	31
Total month	ly tiı	me fa	acilit	у ор	erate	d (ho	ours)	•	0							
3. Monthly Com	3. Monthly Compliance Data:															
Date compliance sampling performed (m/d/y): Not Measured Influent pH: Effluent pH: Effluent Temperature (°C):																
4. Wellfield Data:																
4. Wellfield Data: Monthly Instantaneous Source Volume(gal) Flow Rate(gpm)																
W-1608 W-1605 W-1604 W-1609				0 0 0 0			0.0 0.0 0.0))								
Total:	•			<u>0</u>			0.0	<u>)</u>								
5. Discharge Info	orma	ition:														
Discharge	Loc	ation	<u>!</u>							ceivin ter S	_	<u>n</u>	Ž	Volu	<u>me</u>	
CRD-2 i	injec	<u>ction</u>								V-16	<u>10</u>				_0	
6. Comments: This treatment facility was shut down on 8/31/07. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.																
7. I certify that the information in this report, to the best of my knowledge, is true and correct																
Operator Signatu	ıre: /	1/11	U		M	1				articularita de la companya	Dat	e: <u>1</u> 1	-06-	2008	3	

Self-Monitoring Report LLNL Catalytic Reductive Dehalogenation 2 (CRD2) AREA TF5475-3

1. Reporting Perio	d: Business	s Month	Nove	<u>ember</u>	Ye	ar <u>20</u>	<u>800</u>						
2. Dates (in bold and <u>underline</u>) treated ground water was discharged													
	November 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26												
Total monthly	time facili	ty operat	ed (hou	rs): _	0								
3. Monthly Compl	iance Data	•											
Date compliance sampling performed (m/d/y): Not Measured Influent pH: Effluent pH: Effluent Temperature (°C):													
4. Wellfield Data:													
4. Wellfield Data: Monthly Instantaneous Source Volume(gal) Flow Rate(gpm)													
W-1608 W-1605 W-1604 W-1609		0 0 0 0		0.0 0.0 0.0 0.0									
Total:		0		0.0									
5. Discharge Information	mation:				_								
Discharge L	<u>ocation</u>					eivii ter S	_	<u>n</u>	Ž	Volur	<u>ne</u>		
CRD-2 in	<u>jection</u>					V -16 2	<u>10</u>			-	_0		
6. Comments: This treatment facility was shut down on 8/31/07. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.													
7. I certify that the information in this report, to the best of my knowledge, is true and correct													
Operator Signature: Date: 12-04-2008													

Self-Monitoring Report LLNL Catalytic Reductive Dehalogenation 2 (CRD2) AREA TF5475-3

1. Reporting Period: Business Month <u>December</u> Year <u>2008</u>

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

November 27 28 29 30

December 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): _0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

	Monthly	Instantaneous
Source	Volume(gal)	Flow Rate(gpm)
W-1608	0	0.0
W-1605	0	0.0
W-1604	0	0.0
W-1609	0	0.0
Total:	<u>0</u>	0.0

5. Discharge Information:

Discharge Location	Water Station	<u>Volume</u>
CRD-2 injection	<u>W-1610</u>	_0

Receiving

6. Comments:

This treatment facility was shut down on 8/31/07. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 01-06-2009

Self-Monitoring Report LLNL Vapor Extraction System 08 (VES08) AREA VTF406-HS

- 1. Reporting Period: Business Month October Year 2008
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

October 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

3. Wellfield Data:

Source	Monthly Volume(cu. ft)	Instantaneous Flow Rate(scfm)	P(in. Hg)	· -	Hours of Op.	
W-217	0	0.0	0	0	0	
W-514-2007A	0	0.0	0	0	0	
W-514-2007E	0	0.0	0	0	0	
Total:		0.0			Of an emission of the State of Children (Children Children)	N ATION OF THE STATE OF THE ST

4. Comments:

A data review conducted in late June indicates that recent flow totals for this facility are suspect. The facility was shutdown on 6/26 and will remain down until issues with the flow totals are resolved. Did not operate in the month of Oct. 2008. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: An study Date: 11-05-2008

Self-Monitoring Report LLNL Vapor Extraction System 08 (VES08) AREA VTF406-HS

1. Reporting Period: Business Month November Year 2008

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

November 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26

3. Wellfield Data:

	Monthly	Instantaneous		F	Hours	
Source	Volume(cu. ft)	Flow Rate(scfm)	<u>P(in. Hg)</u>	$T(^{o}F)$ o	f Op.	
W-217	0	0.0	0	0	0	
W-514-2007A	0	0.0	0	0	0	
W-514-2007E	0	0.0	0	0	0	

Total:	<u>0</u>	$\underline{0.0}$				

4. Comments:

A data review conducted in late June indicates that recent flow totals for this facility are suspect. The facility was shutdown on 6/26 and will remain down until issues with the flow totals are resolved. Did not operate in the month of Nov. 2008. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 12-02-2008

Self-Monitoring Report LLNL Vapor Extraction System 08 (VES08) AREA VTF406-HS

1. Reporting Period: Business Month <u>December</u> Year <u>2008</u>

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

November 27 28 29 30 December 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

3. Wellfield Data:

	Monthly	Instantaneous		ŀ	Hours	
Source	Volume(cu. ft	Flow Rate(scfm)	P(in. Hg)	<u>T(°F)</u> o	of Op.	
W-217	0	0.0	0	0	0	
W-514-2007	A 0	0.0	0	0	0	
W-514-2007I	8 0	0.0	0	0	0	
Total:	<u>0</u>	0.0				

4. Comments:

A data review conducted in late June indicates that recent flow totals for this facility are suspect. The facility was shutdown on 6/26 and will remain down until issues with the flow totals are resolved. Did not operate in the month of Dec. 2008. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:

_ Date: **01-06-2009**

Self-Monitoring Report LLNL Vapor Extraction System 14 (VES14) AREA VTF511

- 1. Reporting Period: Business Month October Year 2008
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

October 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

3. Wellfield Data:

à	Monthly	Instantaneous		ŀ	Iours
Source	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	$\Gamma(^{\circ}F)$ o	f Op.
W-274	0	0.0	0	0	0
W-2208A	0	0.0	0	0	0
W-2207A	0	0.0	0	0	
	ŭ		-		0
W-2207B	0	0.0	0	0	0
W-1517	0	0.0	0	0	0
W-2208B	0	0.0	0	0	0
W-2204	0	0.0	0	0	0
W-2206	0	0.0	0	0	0
W-2205	0	0.0	0	0	0
Total:	<u>0</u>	0.0			

4. Comments:

Facility was discovered non-operational on Mon. 8/18/08 with no available electronic data, no indication of date or time of failure. SMR data is based on log book data collected on Friday 8/15/08. Operational days and totals may need to be revised once the electronic data has been evaluated. Facility is currently non-operational. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: 11-05-2008

Self-Monitoring Report LLNL Vapor Extraction System 14 (VES14) AREA VTF511

- 1. Reporting Period: Business Month November Year 2008
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

November 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26

3. Wellfield Data:

	Monthly	Instantaneous]	Hours
Source	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	<u>T(°F)</u> (of Op.
W-274	0	0.0	0	0	0
W-2208A	0	0.0	0	0	0
W-2207A	0	0.0	0	0	0
W-2207B	0	0.0	0	0	0
W-1517	0	0.0	0	0	0
W-2208B	0	0.0	0	0	0
W-2204	0	0.0	0	0	0
W-2206		0.0	0	0	0
W-2205	0	0.0	0	0	0
			1 (4)		
Total:	<u>0</u>	0.0			

4. Comments:

Facility was discovered non-operational on Mon. 8/18/08 with no available electronic data, no indication of date or time of failure. SMR data is based on log book data collected on Friday 8/15/08. Operational days and totals may need to be revised once the electronic data has been evaluated. Facility is currently non-operational. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature. Date: 12-02-200

Self-Monitoring Report LLNL Vapor Extraction System 14 (VES14) AREA VTF511

- 1. Reporting Period: Business Month <u>December</u> Year <u>2008</u>
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

November 27 28 29 30 December 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

3. Wellfield Data:

*	Monthly	Instantaneous		H	Iours	
Source	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	<u>T(°F)</u> o	f Op.	
W-274	0	0.0	0	0	0	
W-2208A	0	0.0	0	0	0	
W-2207A	0	0.0	0	0	0	
W-2207B	0	0.0	0	0	0	
W-1517	0	0.0	0	0	0	
W-2208B	0	0.0	0	0	0	
W-2204	0	0.0	0	0	0	*.
W-2206	0	0.0	0	0	0	
W-2205	0	0.0	0	0	0	
Total:	0	0.0				molecules inscinced

4. Comments:

Did not operate in the month of Dec. Facility was discovered non-operational on Mon. 8/18/08 with no available electronic data, no indication of date or time of failure. SMR data is based on log book data collected on Friday 8/15/08. Operational days and totals may need to be revised once the electronic data has been evaluated. Facility is currently non-operational. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 01-06-2009

Self-Monitoring Report LLNL Vapor Extraction System 19 (VES19) AREA VTF518-PZ

1. Reporting Period: Business Month October Week: 1 Year 2008

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

October 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

3. Wellfield Data:

	Weekly	Instantaneous		F	Hours
Source	Volume(cu. ft)	Flow Rate(scfm)	<u>P(in. Hg)</u> '	<u>Γ(°F)</u> ς	of Op.
W-1615	0	0.0	0	0	0
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
SVB-518-201	0	0.0	0	0	0
Total:	<u>0</u>	0.0			

4. Comments:

This treatment facility was shut down on 2/27/08. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my	knowledge, is true and correct.
Operator Signature:	Date: 11-06-2008

Self-Monitoring Report LLNL Vapor Extraction System 19 (VES19) AREA VTF518-PZ

- 1. Reporting Period: Business Month November Week: 1 Year 2008
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

November 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26

3. Wellfield Data:

	Weekly	Instantaneous		H	Iours
Source	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	<u>Γ(°F)</u> ο	f Op.
W-1615	0	0.0	0	0	0
W-518-1913 [*]	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
SVB-518-201	0	0.0	0	0	0
Total:	<u>0</u>	0.0		BBB State Commission Commission (Commission Commission	

4. Comments:

This treatment facility was shut down on 2/27/08. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the in	nformation i	n this report,	to the best o	f my knowle	edge, is true and corre	ct
Operator Signature;				Ž	3 /	
Operator Signature;	MILLER TO			Date: 1	12-04-2008	

Self-Monitoring Report LLNL Vapor Extraction System 19 (VES19) AREA VTF518-PZ

1. Reporting Period: Business Month <u>December Week: 1</u> Year <u>2008</u>

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

November 27 28 29 30

December 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15

16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

3. Wellfield Data:

)	Weekly	Instantaneous		H	Iours
Source	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	<u>Γ(°F)</u> ο	f Op.
W-1615	0	0.0	0	0	0
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	0	0.0	0	0	0
SVB-518-204	. 0	0.0	0	0	0
SVB-518-201	0	0.0	0	0	0
Total:	<u>0</u>	$\underline{0.0}$			

4. Comments:

This treatment facility was shut down on 2/27/08. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and corre
--

Operator Signature: Date: 01-06-2009

Self-Monitoring Report LLNL Vapor Extraction System 01 (VES01) AREA VTF5475

1. Reporting Period: Business Month October Year 2008

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

October 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

3. Wellfield Data:

1	Monthly	Instantaneous		F	Iours
Source	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	<u>T(°F)</u> c	of Op.
W-ETS-507	0	0.0	0	0	0
W-1605	0	0.0	0	0	0
W-1608	0	0.0	0	0	0
W-2303	0	0.0	0	0	0
W-2212	0	0.0	0	0	0
W-2211	0	0.0	0	0	0
W-2302	0	0.0	0	0	0
SVI-ETS-50	4 0	0.0	0	0	0
Total:	0	0.0			10000000000000000000000000000000000000

4. Discharge Information:

<u>Discharge Location</u>

<u>Nater Station</u>

<u></u>

5. Comments:

This treatment facility was shut down on 10-12-07 due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

6. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 11-03-200

Self-Monitoring Report LLNL Vapor Extraction System 01 (VES01) AREA VTF5475

1. Reporting Period: Business Month November Year 2008

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

November 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26

3. Wellfield Data:

8	Monthly	Instantaneous		F	Hours
Source	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	$T(^{\circ}F)$ c	of Op.
W-ETS-507	0	0.0	0	0	0
W-1605	0	0.0	0	0	0
W-1608	0	0.0	0	0	0
W-2303	0	0.0	0	0	0
W-2212	0	0.0	0	0	0
W-2211	0	0.0	0	0	0
W-2302	0	0.0	0	0	0
SVI-ETS-504	0	0.0	0	0	0
Total:	<u>0</u>	0.0			

4. Discharge Information:

Discharge Location	Receiving Water Station	Volume
VTF5475 Vapor Injection Well	SVI-ETS-505	0

5. Comments

This treatment facility was shut down on 10-12-07 due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

					_
6. I certify that the in	formation in th	is report, to the	he best of my	knowledge, is tru	ue and correc
Operator Signature: .	Shell	(lew age	ur Co	Date: 12-02-200	8
		1 1			

Self-Monitoring Report LLNL Vapor Extraction System 01 (VES01) AREA VTF5475

1. Reporting Period: Business Month <u>December</u> Year <u>2008</u>

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

November 27 28 29 30

December 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15

16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

3. Wellfield Data:

	Monthly	Instantaneous			Hours
Source	Volume(cu. ft)	Flow Rate(scfm)	P(in. Hg)	T(°F)	of Op.
W-ETS-507	0	0.0	0	0	0
W-1605	0	0.0	0	0	0
W-1608	0	0.0	0	0	0
W-2303	0	0.0	0	0	0
W-2212	0	0.0	0	0	0
W-2211	0	0.0	0	0	0
W-2302	0	0.0	0	0	0
SVI-ETS-504	0	0.0	0	0	0
Total:	0	0.0			

4. Discharge Information:

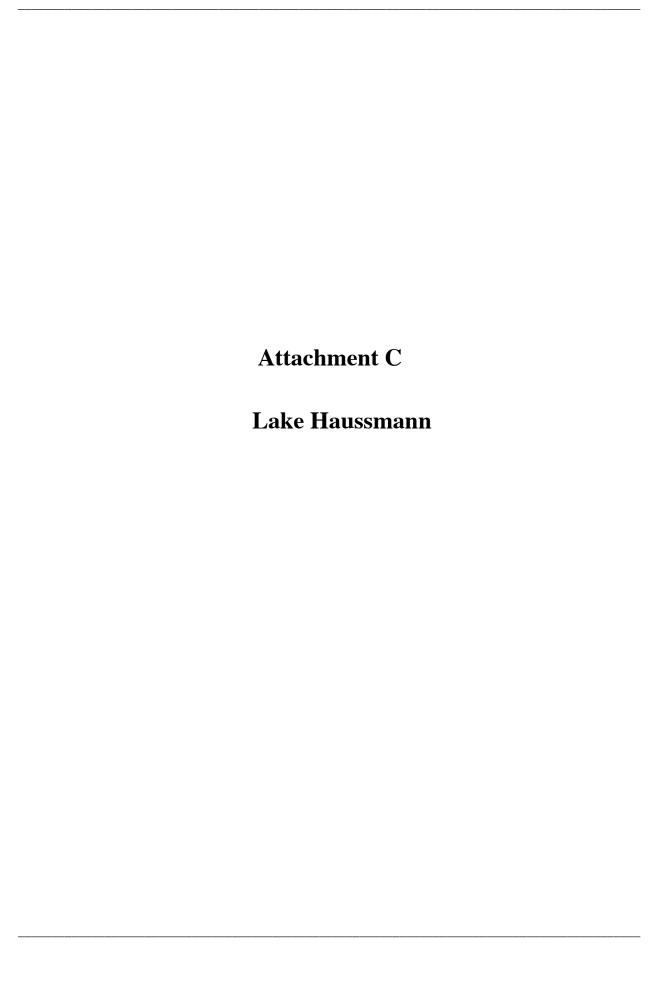
	Receiving				
Discharge Location	Water Station	Volume			
VTF5475 Vapor Injection Well	SVI-ETS-505	_0			

5. Comments:

This treatment facility was shut down on 10-12-07 due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

6. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 12-31-2008



Attachment C

Lake Haussmann Fourth Quarter 2008 Monitoring Program Summary

This attachment summarizes the fourth quarter 2008 LLNL Environmental Protection Department discharge data for Lake Haussmann. Lake Haussmann is an artificial water body that has a 37 acre-ft capacity. It is located in the central portion of the Livermore Site (Fig. C-1) and receives storm water runoff and treated ground water discharges.

Samples are collected from water discharged from Lake Haussmann and analyzed as outlined in Jackson (2002). The discharge samples are used to determine compliance with discharge limits in the *Record of Decision* (DOE, 1992), and the subsequent *Explanation of Significant Differences for Metals Discharge Limits* (Berg et al., 1997).

Dry season (June, July, August, September) discharges are sampled at each manual release or monthly during periods of continual release. Wet season (October through May) discharge samples are collected at the first release of the wet season and one other discharge in conjunction with a storm water monitoring event. Analytic results of discharge samples collected at location CDBX are compared with the LLNL Arroyo Las Positas outfall sample results collected at location WPDC (Fig. C-1). The results for samples collected at locations CDBX and WPDC are presented in Table C-1. All PCBs were below detection limits. No metals exceed discharge limits. Acute bioassay tests showed no acute toxicity. However, chronic toxicity tests resulted in a significant reduction in reproduction for one of the three aquatic organisms, the water flea (Ceriodaphnia dubia) at the CDBX sampling location. The cause for this impaired reproduction in the one sample is unknown. Immediately after receiving the chronic toxicity results from the analytical laboratory, a follow-up sample was collected at the CDBX location on December 1, 2008. This chronic toxicity test demonstrated a 100% survival and reproduction rate in the water flea. The pH values at both locations exceeded the desired range of 6.5 to 8.5. The pH has averaged 8.8 since 1998 at the CDBX sampling location and is typically elevated during summer due to increased photosynthesis.

Discharge from Lake Haussmann remained continuous during the fourth quarter, with one exception. Invasive species mitigation in Arroyo Las Positas requires the temporary cessation of upstream discharges. No discharge from Lake Haussmann occurred from October 20th to November 10th to support this mitigation effort. The Lake Haussmann upper weir gate was otherwise maintained at the lowered position during the entire fourth quarter, so that releases occurred continuously to minimize changes in surface water level and allow for a more natural ecosystem.

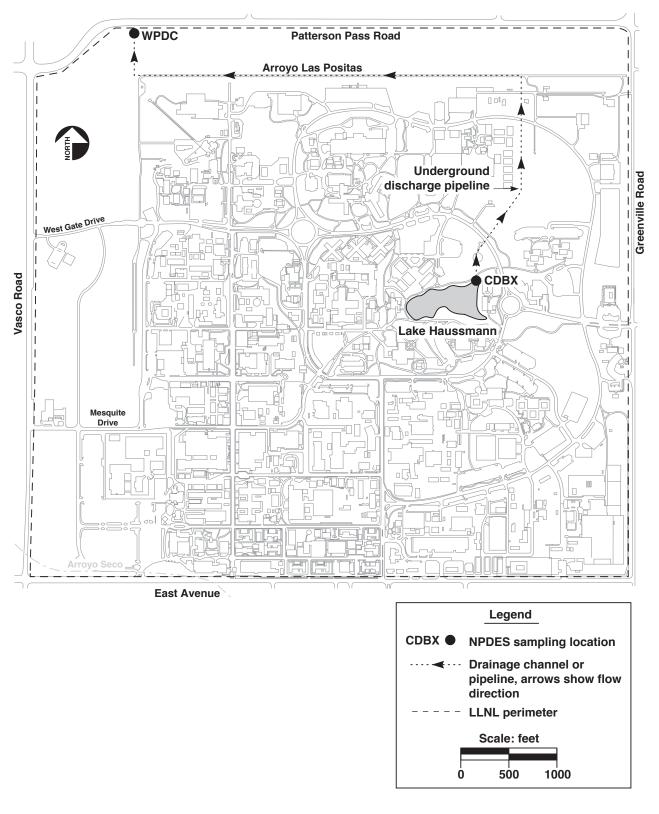
References

- U.S. Department of Energy, *Record of Decision for the Lawrence Livermore National Laboratory*, *Livermore Site*, Lawrence Livermore National Laboratory, Livermore, CA, UCRL-AR-109105, (1992).
- Berg, L.L., E.N. Folsom, M.D. Dresen, R.W. Bainer, and A.L. Lamarre, Eds., *Explanation of Significant Differences for Metals Discharge Limits at the Lawrence Livermore National Laboratory, Livermore Site*, Lawrence Livermore National Laboratory, Livermore, CA, UCRL-AR-125927 (1997).
- Jackson, C.S., *Drainage Retention Basin Monitoring Plan Change*, Letter to Ms. Naomi Feger, San Francisco Bay RWQCB, Lawrence Livermore National Laboratory, Livermore, CA, WGMG02:175:CSJ:RW:kh, (December 6, 2002).

Table C-1. LLNL Lake Haussman release monitoring data for points CDBX and WPDC, October through December 2008.

	<u> </u>	TOT POINTS ODDX an	CDBX 10/13	CDBX 12/1	WPDC 10/13	WPDC 12/1	Discharge Limits 1-Apr through 30-Nov	Discharge Limits 1-Dec through 31-Mar
Physical								
pH	Units	EPA-150.1	8.66	b	8.83	b	not <6.5 or >8.5	not <6.5 or >8.5
Total Suspended solids (TSS)	mg/L	EPA-160.2	1.2	b	20	b	na	na
Polychlorinated biphenyls	_		а	b	b	b	na	na
PCB 1016	ug/L	E8082A	< 0.5	b	b	b	na	na
PCB 1221	ug/L	E8082A	< 0.5	b	b	b	na	na
PCB 1232	ug/L	E8082A	< 0.5	b	b	b	na	na
PCB 1242	ug/L	E8082A	< 0.5	b	b	b	na	na
PCB 1248	ug/L	E8082A	< 0.5	b	b	b	na	na
PCB 1254	ug/L	E8082A	< 0.5	b	b	b	na	na
PCB 1260	ug/L	E8082A	< 0.5	b	b	b	na	na
Metals	-							
Aluminum	mg/L	EPA-200.7	< 0.05	b	0.71	b	na	na
Antimony	mg/L	EPA-200.8	<0.002	b	<0.002	b	0.006	na
Arsenic	mg/L	EPA-200.8	<0.002	b	<0.002	b	0.05	0.01
Barium	mg/L	EPA-200.7	0.17	b	0.11	b	na	na
Beryllium	mg/L	EPA-210.2	<0.0002	b	<0.0002	b	0.004	na
Boron	mg/L	EPA-200.7	2.5	b	1.3	b	na	na
Cadmium	mg/L	EPA-200.8	< 0.001	b	< 0.001	b	0.005	0.0022
Chromium	mg/L	EPA-200.8	0.003	b	< 0.003	b	0.05	na
Cobalt	mg/L	EPA-200.7	< 0.05	b	< 0.05	b	na	na
Copper	mg/L	EPA-200.8	< 0.010	b	< 0.002	b	1.3	0.0236
Hexavalent Chromium	mg/L	EPA-218.6	0.0024	b	0.013	b	na	0.022
Iron	mg/L	EPA-200.7	< 0.05	b	0.87	b	na	na
Lead	mg/L	EPA-200.8	<0.001	b	< 0.001	b	0.015	0.0064
Manganese	mg/L	EPA-200.8	0.0033	b	0.0016	b	0.5	0.5
Mercury	mg/L	EPA-245.1	< 0.0002	b	<0.0002	b	0.002	0.002
Molybdenum	mg/L	EPA-200.8	0.0031	b	< 0.001	b	0.05	na
Nickel	mg/L	EPA-200.8	<0.002	b	< 0.002	b	0.1	0.32
Selenium	mg/L	EPA-200.8	0.002	b	< 0.002	b	0.05	0.01
Silver	mg/L	EPA-200.8	< 0.001	b	< 0.001	b	0.1	0.0082
Thallium	mg/L	EPA-200.8	<0.001	b	< 0.001	b	0.002	na
Vanadium	mg/L	EPA-200.7	< 0.01	b	<0.01	b	na	na
Zinc	mg/L	EPA-200.7	< 0.05	b	< 0.05	b	na	0.22
Acute Toxicity								
Aq. Bioassay, Survival	Percent	Title 22	100	b	100	b	na	na
Chronic Toxicity						b	na	na
Fathead Minnow Survival	Percent	E1000	100	b	b	b	na	na
Fathead Minnow Growth	Percent	E1000	100	b	b	b	na	na
Water Flea Survival	Percent	E1002	100	100	b	b	na	na
Water Flea Reproduction	Percent	E1002	75	100	b	b	na	na
Algae Growth	Percent	E1003	100	b	b	b	na	na

a) All analysis results for these analytes are below reporting limits.b) Sampling for these analytes not required at this location.



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Figure C-1. Location of Lake Haussmann showing discharge sampling locations.

Attachment D

Figures

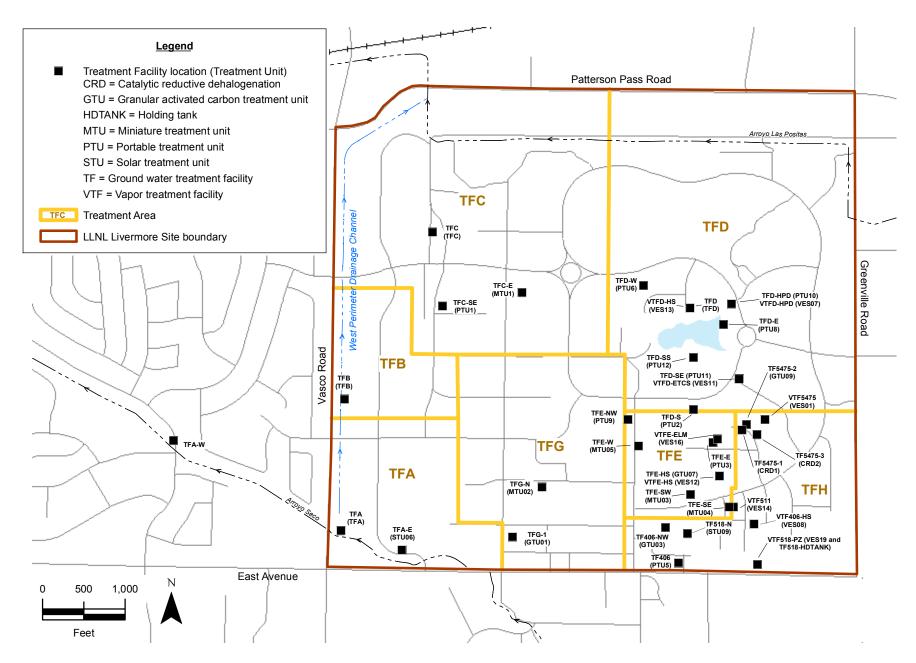


Figure 1. Livermore Site treatment areas and treatment facility locations.

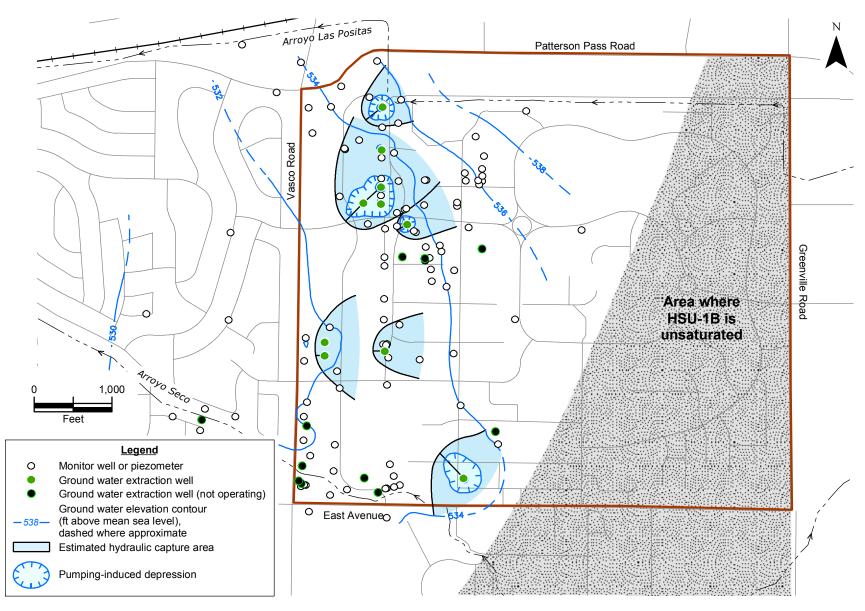


Figure 2. Ground water elevation contour map based on 125 wells completed within HSU-1B showing estimated hydraulic capture areas, LLNL and vicinity, October 2008.

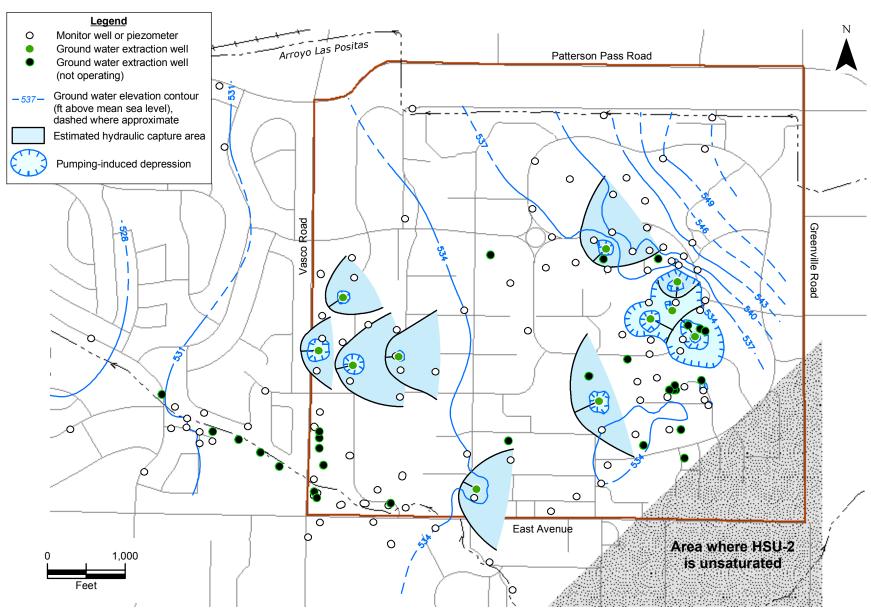


Figure 3. Ground water elevation contour map based on 160 wells completed within HSU-2 showing estimated hydraulic capture areas, LLNL and vicinity, October 2008.

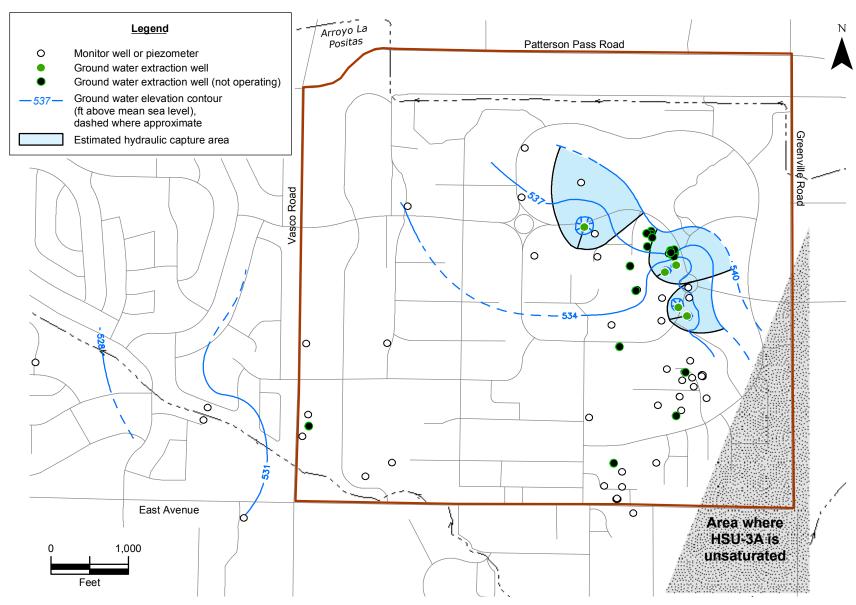


Figure 4. Ground water elevation contour map based on 75 wells completed within HSU-3A showing estimated hydraulic capture areas, LLNL and vicinity, October 2008.

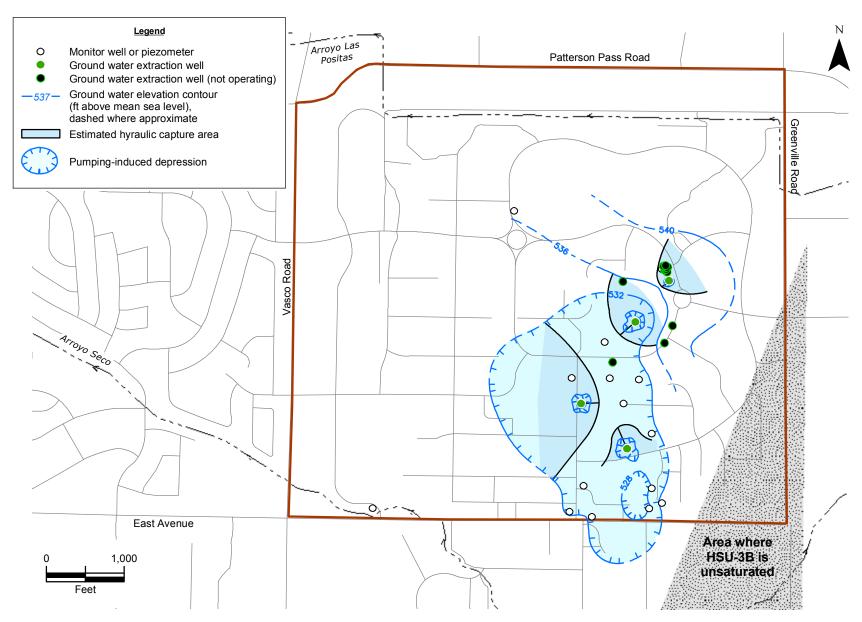


Figure 5. Ground water elevation contour map based on 30 wells completed within HSU-3B showing estimated hydraulic capture areas, LLNL and vicinity, October 2008.

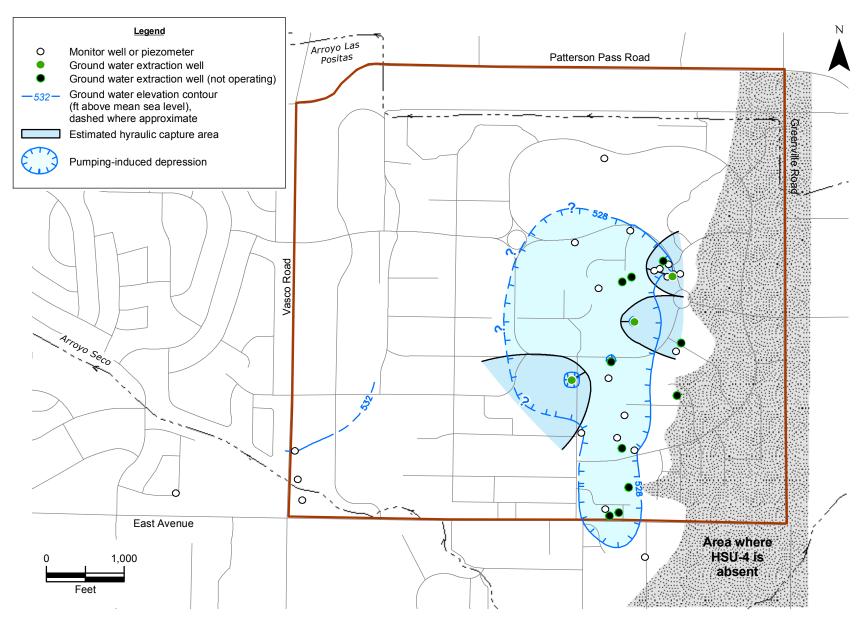


Figure 6. Ground water elevation contour map based on 35 wells completed within HSU-4 showing estimated hydraulic capture areas, LLNL and vicinity, October 2008.

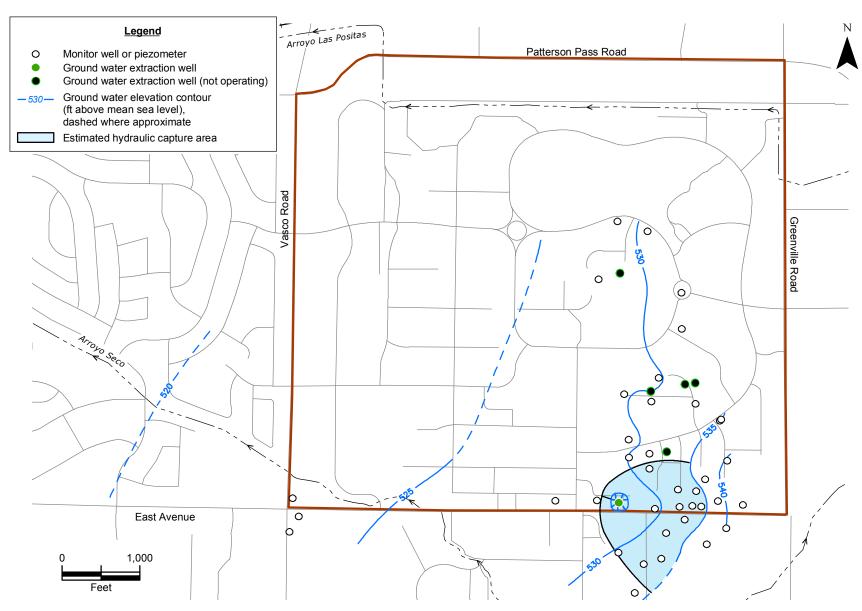


Figure 7. Ground water elevation contour map based on 45 wells completed within HSU-5 showing estimated hydraulic capture areas, LLNL and vicinity, October 2008.